The Common Land Birds of New England

Willcox

POCKET GUIDE

TO THE

COMMON LAND BIRDS

OF

NEW ENGLAND

BY

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PREFACE

THIS little book is the outcome of a long experience in teaching college women to study our common birds. It lays claim to no originality in statement, but is a mere compilation which has drawn freely on all available sources. In general it explains itself, but a few preliminary statements may suitably find place here.

The book, as its name implies, is devoted to the New England birds; but as these little creatures decline to rule themselves by our geographical lines, nearly, if not quite, all of the forms mentioned will be found in the Middle States as well. The list does not aim to be a complete one, even for New England. In the interests of clearness and simplicity it omits nearly all those rarer birds which, as experience has shown, the beginner is not likely to encounter; and, moreover, it includes typical adults alone, omitting (save in the cases of the robin and bluebird) mention of the immature plu-

mage, and in all cases the mention of the transitional plumage. With one or two exceptions the birds included are to be found in Wellesley, most of them in the college grounds. The times of arrival and departure and of egg-laying are for the vicinity of Boston ; but the notes on the time of song, especially of fall song, have been drawn from Bicknell's *A Study of the Singing of Our Birds*, and are for the neighborhood of New York. The names employed are in general those authorized by the American Ornithological Union ; in some instances a second popular name is given, but this invariably follows the A. O. U. popular name. In describing the size of a bird, the "sparrow" referred to is always the English sparrow, although that fact has been stated only when it seemed necessary to avoid confusion.

The key has been constructed purely to aid the student in learning the popular names. For this reason repetition has been freely employed. The red-winged blackbird, for example, which is black with a patch of red and yellow on each shoulder, will be found under the headings "black," "red," and "yellow ;" the tree swallow, whose back is of a bluish green, will be found under "green" and under "blue," and so on. So also birds in which the spots on the breast are very obscure have been

included both in the group of "birds with spotted breasts," and in that of "birds with unspotted breasts."

The student may occasionally be puzzled by finding, after one description of a bird in the key, the words "either sex," and after another description of the same bird the word "female." In some cases, as, for example, the pine warbler, the females vary widely, sometimes quite closely resembling the male, sometimes being decidedly unlike them. Hence two descriptions of a female are necessary.

This little book will have failed of its purpose if it does not stimulate a desire for larger and better bird biographies. Occasional articles have been mentioned in the body of the text. I add here an annotated list of ornithologies which treat of New England birds.

1. AUDUBON. *Birds of North America.* This is one of the three great ornithologies of the early part of the century, and is by far the greatest. It is a large and expensive book, and is now rare. It is devoted mainly to accounts of habits, and is illustrated by colored plates, which, in the folio edition, are exquisitely true both in form and coloring. The arrangement, and in a few cases the names of the birds, are unlike those now adopted.

2. BAIRD, BREWER, AND RIDGEWAY. *History of North American Birds.* This is a large work in three royal octavo volumes, and is fully illustrated. It is probably the most complete and reliable ornithology which we have. Published by Little, Brown, & Co., Boston.

3. CHENEY. *Wood Notes Wild.* A book which aims to reduce to musical notation the songs of some of our common birds, the violin, it is said, having been the instrument employed. This work, although not altogether satisfactory, is the only sustained attempt of the sort which has been made, and deserves attention as opening up a new line of study. Published by Lee & Shepard, Boston.

4. COUES. *Birds of the Colorado Valley.* The interest of this book is chiefly its charmingly written bird biographies. It does not confine itself to the Colorado Valley birds, but describes more or less fully all or almost all the birds of the United States. The accounts are of very unequal length, the less familiar birds being naturally described more fully. It contains a valuable bibliography, which is brought down to the date of publication, 1878. Published by the Government, U. S. Geol. and Geog. Survey of the Territories, Miscellaneous Publications, Number 11.

5. Coues. *Key to North American Birds.* This excellent work is concerned mainly with classification, although it gives occasional bits of valuable information regarding habits. In general it would be of value only to the student who has the bird in his hand. Published by Estes & Lauriat, Boston.

6. Flagg. *A Year with the Birds.* A most charming book, which chats in a fascinating way about many of our common birds. It is, however, rather a book to stimulate enthusiasm than one to impart systematic knowledge. Published by Educational Publishing Company, Boston.

7. Minot. *Land and Game Birds of New England.* This book is, in many ways, the one most to be recommended to beginners. It is simple, clear, arranged with the utmost system, and is smaller and cheaper than any other equally satisfactory one. It has been for some time out of print, but a new edition is announced by Houghton & Mifflin, Boston.

8. Nehrling. *North American Birds.* This work is devoted mainly, though not exclusively, to the description of bird life and habits, and is written in a popular and fascinating style. It is

illustrated by a large number of colored plates, some of which are gems in the eyes both of the ornithologist and of the art lover. The work is as yet incomplete, being in process of publication by Geo. Brumder & Co., Milwaukee.

9. Nuttall and Chamberlain. *Ornithology.* One of the three great ornithologies of the early part of the century. Like Audubon and Wilson, Nuttall deals more with the natural history than with the structure of birds ; but, unlike them, he has enjoyed the benefit of a modern editor, by whom errors have been corrected and additions made, so that this work is now among the very best to be recommended to beginners. Published by Little, Brown, & Co., Boston.

10. Ridgeway. *A Manual of North American Birds.* This excellent work is purely systematic, and would be valuable only to a student who had the specimen in hand. Published by J. B. Lippincott Co., Philadelphia.

11. Stearns and Coues. *New England Bird Life.* A most excellent manual, clear, interesting, accurate, and not too difficult for the beginner. It ranks with Minot and Nuttall. Published by Lee & Shepard, Boston.

12. WILSON AND BONAPARTE. *American Ornithology.* One of the three great ornithologies of the early part of the century. Like Audubon's *Birds*, it retains some now abandoned names and arrangements; but, like that, it is one of the great store-houses from which all later writers must draw. It has recently been reissued in a single large volume by Porter & Coates, Philadelphia.

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SUGGESTIONS FOR STUDY

THE many delightful bird books which have appeared in such striking numbers during the past ten years, owe no small part of their charm to the fact that they take for granted in their readers, at least a bowing acquaintance with the little creatures whose habits and characters they describe. Emancipated thus from bondage to the details of size, color, form, and structure, such books are really able, if one may use the old-fashioned idiom, to "make one acquainted" with the birds. This little book assumes a humbler office, — that of mere introduction. It addresses itself to the would-be student, ignorant of the names of even the commonest birds, but persevering enough to learn the size, color, and markings of any bird he desires to name, providing him with a simple key, through which, by the use of these characteristics, any common bird may identified. To this it adds such suggestions about song, habits, and haunts as will prove of use in the field,

and also references to books and papers which may be helpful and inspiring in home study.

As the book is addressed to the amateur who means to be a real, albeit not a professional, student, a few hints regarding methods of observation may not be out of place. The first requisite for this charming pastime is a good opera glass. If possible, this should be mounted in aluminum, as the lightness thus obtained is of very great advantage in prolonged study. Moreover, it should be covered with leather, or some other non-reflecting material; for the twinkle of the sunlight on a metallic surface is sure to attract the bird's attention and cause alarm. For the same reason it is desirable to have the lenses protected from the sunlight by shades.

Before going into the field to identify, a certain degree of familiarity with the key is most desirable; for in this work it is pre-eminently the first step that costs. Let us select, then, for our first attempt, a bird so common and so tame that he can be examined over and over again until all the required points shall have been discovered. For such a preliminary trial we can make no better choice than the English sparrow, fitted as he is for the subject of a practice lesson by his especial abundance and tameness during the winter months.

If we can get access to even a very small museum collection of our native birds, or a set of fairly good colored pictures of them, preliminary identification of some of these will greatly simplify matters.

Suppose we have had some such preliminary practice, and, equipped with our glasses, we now start out for our first genuine bird hunt. We are dressed in dull browns or greens which attract little attention, and wear soft felt hats which can be pulled forward or pushed back as occasion may demand, and into which we can fasten leaves, thus transforming ourselves into a species of tree, and disarming the suspicions of our new acquaintances. We shall not need gloves; on a day when bare hands are in the least uncomfortable we should not find birds enough to make a first attempt desirable.

We have chosen a sunny morning of late April; we shall not now encounter that bewildering number and variety of bird life which will greet us a month hence, or be perplexed by immature or transitional plumage, and, best of all, the leaves, "no larger than a chipmunk's ear," cannot to-day afford that friendly shelter which will baffle us so often a few weeks hence. It is about half-past seven; a couple of hours earlier would have been better, but at this season the morning "office hours" run on well into the forenoon. And we can come

out again a little before sundown for a second attempt. Our point of observation would, of course, vary with our precise object; to-day, as affording the possibility of a large variety, let us select that strip of meadow-land which skirts the lake. It is dotted with occasional trees, and fringed with a row of alders and willows. Such a place attracts numberless insects, and therefore the birds which feed upon them. We must work around to the east, that we may have the sun at our backs; the light striking on our glasses would blind our eyes, and the reflection would alarm our friends. Be careful to walk quietly; our skirts must not rustle over the dead leaves, and we must pick out soundless stepping-places. A bird's ears are quick by nature and by training. But most of all we must beware of showing any interest in the tree-tops; no old moralist could be more convinced than are the birds that —

> "*Satan finds some mischief still*
> *For idle hands to do.*"

We may look at them, if we will, out of the corner of an eye; but we must contrive to impress them with the idea that we are absorbed in serious personal business, which leaves no room for attention to the affairs of our neighbors.

Now that we are in a good place, look around for a bit of cover, a stone wall, or a tree. Established behind this, we wait until the little excitement of our transit has subsided, and our small friends are again entirely absorbed in their own affairs. Now, if a bird is in sight, we are ready to observe him; if not, we watch quietly. A bending twig or a moving leaf will presently catch our eye, and prove to be the raising of the curtain. We choose a bird, if possible, near the ground; at all events, one which has some other background than the sky, for any object would look black against that high light; and we select one as large and conspicuously colored as we can see. For the present we must beware of the sparrows, which are peculiarly difficult to distinguish, and which should ordinarily be undertaken only after some practice. Now we raise the glasses, avoiding such quick or jerky motions as would be likely to call back to ourselves the attention which has been turned away from us, and our study really begins.

Our bird being well in view, we try to answer as many as possible of these questions: Size — larger or smaller than a sparrow — than a robin? Color? Any conspicuous bright colors? If so, where? Are there markings on the breast? If there are no bright colors, are the upper parts uniform in

tint, or are they mottled? Color of under parts? Wings? Tail? Are there white wing-bars? If so, are there one or two? Are there white markings on the tail? What are the shape and color of the beak? Have either wings or tail a peculiar shape?

These points, numerous though they seem at first, will soon be noted almost unconsciously, and by means of them one can learn from the key the name of the bird, and then can get hints for further study from the brief notes in Part II.

That we may be quite sure how to use the key, let us trace out together a single specimen. Notice yonder fine fellow, nearly as large as a robin, entirely black save for a red yellow-edged patch on either shoulder like an epaulet. We turn to our key to discover his name. What colors are conspicuous? Obviously both red and black, and we shall find that it makes no difference which of the two we select. Let us choose red. We are directed to go to 1. Here we are met by two alternatives: is the body largely red, or is the red present only in small patches? We choose the second, and are directed to 5. Here we are met by five alternatives, and choose the fourth: red patch on the shoulder. This choice gives us the name of our bird, and refers us to the fuller description to be found in the second part. Had we selected black instead of red,

our task would have been a little longer, but the result would have been the same.

Our suggestions are only for the first step in this study; when that has once been taken, each student will best beat out his own path for himself. One additional caution may be given about tracing birds by their song. So long as a bird continues to sing he is unalarmed, and you may safely approach him. The first sign of disquiet is his silence; remain motionless, and, reassured, he will presently begin again, when you may creep a little nearer. A devious course excites his suspicions less than a direct one; and any bit of cover, as need hardly be said, is of the greatest service.

ARTIFICIAL KEY

TO THE COMMONER SPECIES OF NEW ENGLAND BIRDS

ANY one of the following colors conspicuous, either as markings, or (save in the case of white), as forming a large part of the body color:

Red. Go to **1** (below).
Blue. Go to **15** (p. 12).
Green. Go to **26** (p. 14).
Yellow or Orange. Go to **29** (p. 15).
Black and White Mottling. Go to **51** (p. 19).
Black (except black and white mottling). Go to **61** (p. 21).
Brown, Slate, Gray, or Olivaceous, either uniform or mottled, but not associated with yellow. Go to **84** (p. 25).
White, conspicuous as markings, or entering largely into the color of the upper parts. Go to **157** (p. 37).

I. RED

CONSPICUOUS EITHER AS MARKINGS, OR AS FORMING A LARGE PART OF THE BODY COLOR.

1. Body, as distinct from wings and tail, wholly or largely red. Go to **2.**
Red present in comparatively small patches. Go to **5.**

2. Entire body of a bright scarlet; wings and tail black. **Scarlet Tanager, Male in Summer Plumage.** (p. 95.)

Entire body of a dull rose- or brick-red, largely mixed with brown. Go to **3.**

Under parts, rump, and part of tail flame-color, almost all the rest of the bird black. **Baltimore Oriole, Male.** (p. 124.)

NOTE. — The color is really orange, but sometimes looks flame-color as the bird flies.

3. Wing with white bar. **White-winged Crossbill, Male.** (p. 118.)

Wing without white bar. Go to **4.**

4. Bird stout; color brick-red; bill crossed, i.e., upper mandible shutting against the lower like a pair of scissors, and projecting beyond it. Bird usually found in winter and among cone-bearing trees. **American Crossbill, Male.** (p. 119.)

Bird not especially stout; color a rose-red; bill of the ordinary pattern. Bird ordinarily not with us in winter. **Purple Finch, Male.** (p. 120.)

5. Red patch on back of head. Go to **6.**

Red patch on top of head; bird olivaceous above, lighter below. Very small. Go to **9.**

Red patch on forehead. **Redpoll, Either Sex.** Go to **10.**

Red patch on shoulder; patch bordered behind with yellow; rest of body black. **Red-winged Blackbird, Male.** (p. 127.)

Red patch on breast or throat, either in the middle or at the sides. Go to **11**.

6. Upper parts mottled black and white; no white spot on rump. Go to **8**.

Upper parts mottled brown and black; conspicuous white spot on rump. **Flicker, Either Sex.** Go to **7**.

7. Black patch under each eye, extending backward from beak. **Flicker, Male.** (p. 145.)

No such black patches. **Flicker, Female.** (p. 145.)

8. Bird not so large as a sparrow. **Downy Woodpecker, Male.** (p. 146.)

Bird nearly as large as a robin. **Hairy Woodpecker, Male.** (p. 147.)

9. Red patch bordered by yellow and this by black. **Golden-crowned Kinglet, Male.** (p. 49.)

Red patch not bordered by yellow and black. **Ruby-crowned Kinglet, Male.** (p. 48.)

10. Breast rosy as well as forehead; rest of bird mottled; rump tinged with rose, which is more or less marked, according to age and season. Rather smaller than a sparrow. **Redpoll, Male.** (p. 117.)

No rose, except on forehead and sometimes on rump, and this often inconspicuous; bird in other respects like the male (see above). **Redpoll, Female.** (p. 117.)

11. Bird considerably larger than a sparrow; breast with a rose spot about as large as a half-dollar; under parts white. A sweet singer. **Rose-breasted Grosbeak, Male.** (p. 99.)

Bird smaller than a sparrow; no rose spot on breast. Go to **12**.

12. Upper parts largely black. Go to **13.**
Upper parts not black. Go to **14.**

13. Throat and breast black. **American Redstart, Male.** (p. 65.)
Throat and breast flame-color. **Blackburnian Warbler, Male.** (p. 74.)

14. Throat metallic red; upper parts green; under parts grayish. **Ruby-throated Hummingbird, Male.** (p. 141.)
Throat, breast, forehead, and rump more or less rosy; rest of bird mottled brownish. **Redpoll, Male.** (p. 117.)

II. BLUE

CONSPICUOUS EITHER AS MARKINGS, OR AS FORMING A LARGE PART OF THE BODY COLOR.

15. Body of nearly uniform color above and below. Go to **16.**
Body of different colors above and below; blue restricted to upper parts. Go to **19.**

16. Body bronze-black with purple reflections. Go to **17.**
Body a bright greenish blue; wings and tail brown. **Indigo Bunting, Male.** (p. 97.)

17. Bird distinctly smaller than a robin; swallow-like; wings very long. **Purple Martin, Male.** (p. 93.)
Bird about the size of a robin, or larger; not swallow-like; wings moderate. **Purple Grackle, Either Sex.** Go to **18.**

18. Head and breast a rich metallic blue or purple. **Purple Grackle, Male.** (p. 122.)

Head and breast showing very slight greenish reflections. **Purple Grackle, Female.** (p. 122.)

19. Under parts white or grayish. Go to **20.**

Under parts chestnut. Go to **25.**

Throat and upper part of breast yellow, crossed by a patch of brown; upper parts gray-blue; yellow patch between shoulders. **Parula Warbler, Either Sex.** (p. 79.)

20. Birds considerably larger than a robin; crest conspicuous. Go to **21.**

Birds not larger than a robin; no crest. Go to **23.**

21. Upper parts of uniform gray-blue with white collar; under-parts in the main white, but with a gray-blue band across the breast. **Belted Kingfisher, Either Sex.** Go to **22.**

Back grayish blue; wings and tail bright blue, conspicuously marked with black and white; under parts gray; upper part of breast crossed by a black crescent. **Blue Jay, Either Sex.** (p. 132.)

22. Under parts white, except for gray-blue breast band; sides under the wings dull blue. **Belted Kingfisher, Male.** (p. 149.)

Chestnut band across belly, in addition to breast band; sides under wings chestnut. **Belted Kingfisher, Female.** (p. 149.)

23. Wings very long; bird swallow-like. Go to **24.**

Wings moderate; tail very short; under parts white; bird addicted to running up and down trunks of trees. **White-breasted Nuthatch, Either Sex.** (p. 54.)

Wings and tail moderate; under parts mottled gray; upper parts grayish, showing more or less blue, especially on wings and tail. **Bluebird, Young of Either Sex.** (p. 39.)

24. Upper parts metallic blue-green; under parts pure white. **Tree Swallow, Either Sex.** (p. 91.)

Upper parts grayish brown, glossed on back and head with steel blue; under parts dark mottled gray. **Purple Martin, Female.** (p. 93.)

25. Upper parts steel-blue; wings very long; tail deeply notched; throat deep chestnut; remaining under parts lighter chestnut. **Barn Swallow, Either Sex.** (p. 92.)

Upper parts grayish blue; tail very short; wings moderate; throat gray; remaining under parts yellowish chestnut. **Red-breasted Nuthatch, Either Sex.** (p. 53.)

Upper parts rather light blue; neither wings nor tail peculiar; under parts of uniform reddish chestnut. **Bluebird, Either Sex.** (p. 39.)

III. GREEN

CONSPICUOUS EITHER AS MARKINGS, OR AS FORMING A LARGE PART OF THE BODY COLOR.

26. Bird at least two-thirds as large as a sparrow. Go to **27.**

Bird less than half as large as a sparrow. Go to **28.**

Bird larger than a sparrow; upper parts yellowish green; under parts greenish yellow. **Scarlet Tanager, Female and Male in Fall Plumage.** (p. 95.)

27. Under and upper parts both of a bluish green; wings and tail brown. **Indigo Bunting, Male.** (p. 97.)

Under parts pure white; wings very long. **Tree Swallow.** (p. 91.)

28. Throat ruby-colored. **Ruby-throated Hummingbird, Male.** (p. 141.)

Throat white. **Ruby-throated Hummingbird, Female.** (p. 141.)

IV. YELLOW OR ORANGE

CONSPICUOUS EITHER AS MARKINGS, OR AS FORMING A LARGE PART OF THE BODY COLOR.

29. Rather large birds; distinctly larger than an English sparrow. Go to **30.**

Rather small birds; distinctly smaller than an English sparrow. Go to **34.**

Bird about the size of an English sparrow; small yellow spot in front of each eye. **White-throated Sparrow.** (p. 111.)

30. Upper parts largely black. Go to **31.**

Upper parts streaked with black, brown, and flaxen, somewhat like a sparrow's. Go to **32.**

Upper parts olivaceous or brown, not distinctly streaked. Go to **33.**

31. Under parts black; yellow present only as the hind border of a red shoulder patch. **Red-winged Blackbird, Male.** (p. 127.)

NOTE. — The red feathers are sometimes displaced so that the shoulder patch looks entirely yellow.

Under parts mainly orange. **Baltimore Oriole, Male,** (p. 124.)

32. Bird rather larger than a robin; breast clear yellow with black crescent. **Meadow Lark, Either Sex.** (p. 125.)

Bird considerably smaller than a robin; breast dull yellowish brown without marks. **Bobolink, Female, and Male in Fall Plumage.** (p. 129.)

33. Under parts yellow or orange; wings with much white. **Baltimore Oriole, Female.** (p. 124.)

Under parts greenish yellow; wings and tail brown without white markings. **Scarlet Tanager, Female and Male in Fall Plumage.** (p. 95.)

Throat slate, shading into lemon yellow on belly. **Crested Flycatcher, Either Sex.** (p. 138.)

Under parts brown, shading into yellow on belly; tail tipped with yellow. **Cedar Waxwing, Either Sex.** (p. 89.)

34. Entire body, exclusive of wings and tail, yellow, either clear or of a somewhat greenish tinge. Go to **35.**

Yellow forming a large portion of the under parts. Go to **36.**

Yellow present only in patches. Go to **46.**

35. Wings and tail black with white markings; yellow of body clear and brilliant. **Goldfinch, Male in Summer Plumage.** (p. 115.)

Upper parts, wings, and tail of a somewhat greenish yellow passing into dusky, and without white markings; breast with faint reddish brown markings. **Summer Warbler, Either Sex.** (p. 78.)

Upper parts greenish yellow; wings and tail brown; wing with two white bars; under parts clear yellow. **Pine Warbler, Either Sex.** (p. 73.)

36. Throat and breast yellow, color clear or slightly clouded. Go to **37.**

Throat and breast yellow, but marked with brown or black. Go to **43.**

37. Tail with white spots. Go to **38.**

Tail without white spots. Go to **40.**

38. Upper parts black, conspicuously marked with white. **Blackburnian Warbler, Male.** (p. 74.)

Upper parts black-brown, conspicuously marked with white. **Blackburnian Warbler, Female.** (p. 74.)

Upper parts olivaceous. Go to **39.**

39. Nearly as large as a sparrow. **Pine Warbler, Either Sex.** (p. 73.)

Only about two-thirds as large as a sparrow. **Parula Warbler, Female.** (p. 79.)

40. Cheeks and forehead black. **Maryland Yellow-throat, Male.** (p. 66.)

Cheeks and forehead colored like the rest of the head. Go to **41.**

41. Wing with two white bars. **Yellow-throated Vireo, Either Sex.** (p. 84.)

Wing without white bars. Go to **42.**

42. Head ashy; remaining upper parts olivaceous. **Nashville Warbler, Either Sex.** (p. 80.)

Head olivaceous, of much the same color as back. **Maryland Yellow-throat, Female.** (p. 66.)

43. Breast bright yellow with black markings. Go to **44.**

Breast bright yellow crossed by a broad brown band. **Parula Warbler, Either Sex.** (p. 79.)

Breast sulphur-yellow with dark brown markings. **Water-thrush, Either Sex.** (p. 67.)

Breast yellow marked with ill-defined brown streakings. **Yellow Redpoll, Either Sex.** (p. 72.)

44. Markings restricted to sides. Go to **45.**

Markings extending all the way across the breast. **Magnolia Warbler, Either Sex.** (p. 76.)

45. Wings and tail with much white; black markings inconspicuous. **Blackburnian Warbler.** Go to **38.**

Wings without white. **Prairie Warbler, Either Sex.** (p. 70.)

46. Upper parts, breast and throat black; wings, tail, and sides of breast marked with salmon. **American Redstart, Male.** (p. 65.)

Throat and forebreast black; cheeks yellow; upper parts olivaceous. **Black-throated Green Warbler, Either Sex.** (p. 71.)

Black not conspicuous. Go to **47.**

47. Crown yellow, but no other yellow spots. Go to **48.**

Yellow spots elsewhere than on crown; sometimes crown yellow as well. Go to **50.**

48. Chestnut patch in front of each wing; upper parts mottled; much white on wings and tail. **Chestnut-sided Warbler, Either Sex.** (p. 75.)

No chestnut patches; upper parts olivaceous, not mottled; two light wingbars; no white on tail. Very small. Go to **49.**

49. Crown yellow with orange centre. **Golden-crowned Kinglet, Male.** (p. 49.)

Crown yellow without orange centre. **Golden-crowned Kinglet, Female.** (p. 49.)

50. Yellow patches in front of wings; yellow wingbar; tail with a pair of large yellow patches. **American Redstart, Female.** (p. 65.)

Yellow rump; usually also a yellow crown and a yellow spot in front of wing. All the spots, except that on the rump, may, however, be indistinct. **Myrtle Warbler, Either Sex.** (p. 77.)

V. BLACK AND WHITE MOTTLING

FORMING A LARGE PART OF THE BODY COLOR.

51. Medium sized or large birds — even the smallest nearly as large as an English sparrow. Go to **52.**

Small birds — considerably smaller than a sparrow. Go to **59.**

52. Under parts largely or wholly white. Go to **53.**

Under parts not white. Go to **58.**

53. Beak dark, very long, and strong; birds usually seen clinging against the trunk of a tree. **Woodpeckers.** Go to **54.**

Beak light, not especially long; birds have the ordinary perching habit. Go to **57.**

54. Bird nearly as large as a robin. **Hairy Woodpecker.** Go to **55.**

Bird about the size of a sparrow. **Downy Woodpecker.** Go to **56.**

55. Back of head with red patch. **Hairy Woodpecker, Male.** (p. 147.)

Back of head without red patch. **Hairy Woodpecker, Female.** (p. 147.)

56. Back of head with red patch. **Downy Woodpecker, Male.** (p. 146.)

Back of head without red patch. **Downy Woodpecker, Female.** (p. 146.)

57. Upper parts mainly dark, somewhat mottled with white and flaxen (which as the bird flies often looks white); breast with a rosy spot. **Rose-breasted Grosbeak, Male.** (p. 99.)

Upper parts largely white intermixed with light brown; back black mottled with white and flaxen; under parts white. **Snowflake, Male.** (p. 114.)

58. Under parts black. **Bobolink, Male.** (p. 129.)

Under parts white, heavily streaked with blackish brown. **Red-winged Blackbird, Female.** (p. 127.)

59. Both upper and under parts mottled. **Black and White Warbler, Male.** (p. 81.)

Upper parts mottled; under parts not. Go to **60.**

Under parts mottled; upper parts not. **Myrtle Warbler, Either Sex.** (p. 77.)

60. Crown yellow; under parts white with chestnut sides. **Chestnut-sided Warbler, Either Sex.** (p. 75.)

Crown striped black and white; under parts white. **Black and White Warbler, Female.** (p. 81.)

VI. BLACK

CONSPICUOUS EITHER AS MARKINGS, OR AS FORMING A LARGE PART OF THE BODY COLOR.

N. B. — Black and white mottlings are not included in this group; but several birds are included, which, though not really black, are so dark as to often appear black.

61. Black forming a large part of the body color. Go to **62.**
Black wings and tail. Go to **77.**
Black present as conspicuous markings. Go to **78.**

62. Entire body, or nearly the entire body, black. Go to **63.**
Under parts black; upper parts black, buff, gray, and white. **Bobolink, Male.** (p. 129.)
Upper parts, breast, and throat black with salmon markings. **American Redstart, Male.** (p. 65.)
Black restricted largely or wholly to upper parts. Go to **70.**

63. Bird swallow-like. Go to **64.**
Bird not swallow-like. Go to **66.**

64. Tail very short, so that the bird almost appears to have none; color really a dark brown. **Chimney Swift, Either Sex.** (p. 143.)
Tail of ordinary length. **Purple Martin, Either Sex.** Go to **65.**

65. Color an intense purple-black. **Purple Martin, Male.** (p. 93.)
Color a sooty brown, lighter below. **Purple Martin, Female.** (p. 93.)

66. Bird not much, if any, larger than a robin. Go to **67.**
Bird at least twice as large as a robin. **American Crow, Either Sex.** (p. 131.)

67. Bird with a red or yellow patch on the shoulder. **Red-winged Blackbird, Male.** (p. 127.)

NOTE. — The patch consists of both red and yellow feathers; but the red ones are sometimes disarranged, so that the yellow ones only show.

Bird without such a patch. Go to **68.**

68. Bird distinctly smaller than a robin; head brown. **Cowbird, Male.** (p. 128.)
Bird distinctly larger than a robin; head and breast of a deep purple. **Purple Grackle, Male.** (p. 122.)
Bird about the size of a robin. Go to **69.**

69. Black quite rusty. **Rusty Blackbird, Either Sex.** (p. 123.)
Black not rusty. **Purple Grackle, Female.** (p. 122.)

70. Under parts largely or wholly white. Go to **71.**
Under parts chestnut, darker on throat; bird swallow-like. **Barn Swallow, Either Sex.** (p. 92.)
Throat and forebreast flame-color or orange, passing behind into white, which is marked with black. **Blackburnian Warbler, Male.** (p. 74.)
Under parts yellow, heavily marked with black. **Magnolia Warbler, Either Sex.** (p. 76.)
Under parts with a considerable amount of solid black. Go to **75.**

71. Rump white. Go to **72.**
Rump not white. Go to **73.**

72. Head black; breast with rose spot. **Rose-breasted Grosbeak, Male.** (p. 99.)

Head white, more or less suffused with light brown; under parts pure white, or at most tinged with brown. **Snowflake, Male.** (p. 114.)

73. Wings very long; bird swallow-like. Go to **74.**

Wings of moderate length; bird not swallow-like; upper parts a blackish brown. **Kingbird, Either Sex.** (p. 139.)

74. Under parts entirely white; upper parts really a dark blue-green. **Tree Swallow, Either Sex.** (p. 91.)

Under parts white, save that the breast is crossed by a dark brown band; upper parts really a sooty brown. **Bank Swallow, Either Sex.** (p. 90.)

75. Bird distinctly smaller than a sparrow. **American Redstart, Male.** (p. 65.)

Bird distinctly larger than a sparrow. Go to **76.**

76. Throat black; remaining under parts orange. **Baltimore Oriole, Male.** (p. 124.)

Throat and forebreast black; remaining under parts white in the middle and chestnut at the sides. **Towhee, Male.** (p. 100.)

77. Body red. **Scarlet Tanager, Male in Summer Plumage.** (p. 95.)

Body yellow. **Goldfinch, Male in Summer Plumage.** (p. 115.)

Body gray; wings really a blackish brown. **Northern Shrike, Either Sex.** (p. 88.)

78. Birds nearly or quite as large as a robin; black present as a crescent on the breast. Go to **79.**

Bird about the size of an English sparrow; head with longitudinal stripes of black and white; back sparrow-like. **White-throated Sparrow, Male.** (p. 111.)

Birds distinctly smaller than a sparrow. Go to **80.**

79. Throat and breast a light lemon-yellow. **Meadowlark, Either Sex.** (p. 125.)

Throat and forebreast a lilac-brown. **Flicker, Either Sex.** Go to **7.**

Throat and breast gray. **Blue Jay, Either Sex.** (p. 132.)

80. Top of head or forehead black. Go to **81.**

Top of head not black. Go to **83.**

81. Throat black. **Chickadee, Either Sex.** (p. 51.)

Throat not black. Go to **82.**

82. Under parts yellow. **Maryland Yellow-throat, Male.** (p. 66.)

Under parts white. **White-breasted Nuthatch, Either Sex.** (p. 54.)

Under parts rusty brown. **Red-breasted Nuthatch, Either Sex.** (p. 53.)

83. Under parts yellow, marked with black. Go to **44.**

Under parts white, marked with black; upper parts slate-blue mottled with black. **Myrtle Warbler, Either Sex.** (p. 77.)

Throat and forebreast black; cheeks yellow. **Black-throated Green Warbler, Either Sex.** (p. 71.)

VII. BROWN, SLATE, GRAY, OR OLIVACEOUS

CONSPICUOUS, EITHER UNIFORM IN TINT OR MOTTLED, BUT NOT ASSOCIATED WITH YELLOW.

84. Upper parts slate, gray, brown or olivaceous, either plain or mottled. Go to **85.**

Under parts, at least throat and forebreast, or sides of belly, solid brown. Go to **153.**

85. Under parts, at least breast and throat, of nearly the same shade as the back. Go to **86.**

Under parts not of the same color as the back, or at least distinctly lighter in shade. Go to **99.**

86. Bird swallow-like. Go to **87.**

Bird not swallow-like. Go to **88.**

87. Tail so short that the bird almost appears to have none. **Chimney Swift, Either Sex.** (p. 143.)

Tail not remarkably short. **Purple Martin, Female.** (p. 93.)

88. Bird distinctly smaller than a sparrow. Go to **89.**

Bird not distinctly smaller than a sparrow. Go to **93.**

89. Birds brown, somewhat mottled; have the habit of carrying the tail cocked. Very small. Go to **90.**

Birds olivaceous; do not carry the tail cocked. Go to **91.**

90. Tail very short; feet if stretched out backward would reach some distance beyond it; bird considerably smaller than house wren. **Winter Wren, Either Sex.** (p. 59.)

Tail not very short; feet if stretched out backward would reach about to its tip. **House Wren, Either Sex.** (p. 60.)

91. Crown with yellow or scarlet patch. Bird very small. Go to **92.**

Crown without such a patch. Bird nearly as large as a sparrow. **Pine Warbler, Female.** (p. 73.)

92. Crown patch scarlet. **Ruby-crowned Kinglet, Male.** (p. 48.)

Crown patch flame-colored bordered with yellow. **Golden-crowned Kinglet, Male.** (p. 49.)

Crown patch yellow. **Golden-crowned Kinglet, Female.** (p. 49.)

93. Bird obscurely mottled. Go to **94.**

Bird not mottled. Go to **96.**

94. Wing with two white bars; rump yellowish. **White-winged Crossbill, Female.** (p. 118.)

Wing without white bars. Go to **95.**

95. Beak with mandibles crossing one another like the blades of a pair of scissors; rump yellowish green. **American Crossbill, Female.** (p. 119.)

Beak of the ordinary pattern; rump not of contrasting color. **Cowbird, Female.** (p. 128.)

96. Bird of a blackish slate color. Go to **97.**

Bird largely brown. Go to **98.**

97. No white on the body; beak black. **Catbird, Either Sex.** (p. 63.)

Belly and outer tail feathers white; beak light. **Slate-colored Junco, Either Sex.** (p. 105.)

98. Upper parts brown, passing into slate on the rump; under parts brown, passing into yellow on the belly; tail tipped with yellow. **Cedar Waxwing, Either Sex.** (p. 89.)

Upper parts of uniform brown; throat and forebreast of the same shade; remaining under parts white in the middle and chestnut on the sides; tail with white blotches. **Towhee, Female.** (p. 100.)

99. Under parts in the main solidly colored with some shade of brown. Go to **100.**

Under parts in the main white or gray, either clear or tinged with brownish or yellowish; often spotted. Go to **101.**

Throat and forebreast ash, passing into yellow on belly. **Crested Flycatcher.** (p. 138.)

100. Breast chestnut, unspotted: throat black and white; tips of outer tail feathers white. **American Robin, Either Sex.** (p. 41.)

Breast chestnut, spotted with blackish. **American Robin, Young of Either Sex.** (p. 41.)

Breast yellowish brown, unmarked. **Bobolink, Female and Male in Fall Plumage.** (p. 129.)

Breast reddish brown, passing into white on belly, marked with round black spots and crossed by a black crescent. **Flicker, Either Sex.** Go to **7.**

101. Throat black; remaining under parts gray. Go to **102.**

Under parts unspotted, of nearly uniform tint. Go to **103.**

Under parts white, unspotted; breast crossed by a band of contrasting color. Go to **131.**

Under parts gray, obscurely mottled. Go to **132**.

Under parts distinctly spotted with brown or blackish. Go to **139**.

102. Top of head black. **Chickadee, Either Sex.** (p. 51.)

Top of head gray. **English Sparrow, Male.** (p. 96.)

NOTE. — In the young the black spot is often somewhat obscured with gray.

103. Under parts rather faintly tinged with rose; cap carmine. **Redpoll, Male.** (p. 117.)

Under parts without any rosy tint; no carmine cap. Go to **104**.

104. Legs and beak very long and slender; bird fitted for wading. **Solitary Sandpiper, Either Sex.** (p. 153.)

Legs and beak not very long and slender. Go to **105**.

105. Bird distinctly larger than a sparrow. Go to **106**.

Bird as small or smaller than a sparrow. Go to **109**.

106. Upper parts black-brown; tail with white tip. **Kingbird, Either Sex.** (p. 139.)

Upper parts mottled with brown, black, and flaxen, somewhat like a sparrow's. **Snowflake, Female.** (p. 114.)

Upper parts clear gray or brownish gray; wings and tail black-brown. **Northern Shrike, Either Sex.** (p. 88.)

Upper parts olivaceous. Go to **107**.

107. Under parts white; tail very long. Go to **108**.

Under parts greenish yellow; tail of moderate length. **Scarlet Tanager, Female and Male in Fall Plumage.** (p. 95.)

108. Large white spots on outer tail feathers, the largest ones nearly an inch long; beak largely yellow. **Yellow-billed Cuckoo, Either Sex.** (p. 151.)

Small white spots on tail about one-fourth of an inch long; beak almost entirely black. **Black-billed Cuckoo, Either Sex.** (p. 150.)

109. Birds in the habit of carrying the tail cocked; very small. Go to **110.**

Birds not in the habit of carrying the tail cocked; not very small. Go to **112.**

110. Back with a patch of mottled black and white; birds usually found in swampy places. **Marsh Wrens.** Go to **111.**

Back without a patch of mottled black and white; bird not found especially in wet places. Go to **90.**

111. Bill half an inch long or more. **Long-billed Marsh Wren, Either Sex.** (p. 57.)

Bill from one-third to two-fifths of an inch long. **Short-billed Marsh Wren.** (p. 58.)

112. Back mottled. Go to **113.**

Back not mottled. Go to **118.**

113. Back and breast yellowish gray; two white bars on wing; white spots on outer tail feathers. **Pine Warbler, Female.** (p. 73.)

Back mottled in shades of bay, brown, and black. Go to **114.**

114. Bill long and slender; bird creeps up tree trunks and branches. **Brown Creeper, Either Sex.** (p. 55.)
Bill short and stout; bird does not creep. Go to **115.**

115. White spot on throat, sharply marked off from general gray of breast; head with black and white stripes; small patch of yellow in front of eye. **White-throated Sparrow, Either Sex.** (p. 111.)
No such white spot. Go to **116.**

116. Top of head chestnut. Go to **117.**
Top of head gray. **English Sparrow, Female.** (p. 96.)

117. Gray of breast clear; bill black. **Chipping Sparrow, Either Sex.** (p. 108.)
Gray of breast somewhat rusty; bill flesh-colored: general tone of color a little lighter than the preceding. **Field Sparrow, Either Sex.** (p. 107.)
Gray of breast ashy, that of sides of belly rusty; bill black above, yellow below; breast with an indistinct brownish spot; wing with two white bars. **Tree Sparrow, Either Sex.** (p. 110.)

118. Top of head black. Go to **119.**
Top of head not black. Go to **121.**

119. Throat black. **Chickadee, Either Sex.** (p. 51.)
Throat gray. Go to **120.**

120. Under parts uniform gray. **White-breasted Nuthatch, Either Sex.** (p. 54.)
Under parts rusty. **Red-breasted Nuthatch, Either Sex.** (p. 53.)

121. Crown brightly colored. Go to **92.**

Crown not different in color from the rest of the head. Go to **122**.

122. White wing-bars present. Go to **123**.
White wing-bars not present. Go to **128**.

123. Tail with white blotches. Go to **124**.
Tail without white blotches. Go to **125**.

124. Wings and tail nearly or quite black; beak conical. **Goldfinch, Female or Male in Winter Plumage.** (p. 115.)
Wings and tail brown; beak long and slender. **Pine Warbler, Female.** (p. 73.)

125. Bird very small; from top of head to tip of tail about four inches. Go to **126**.
Bird not extraordinarily small; from top of head to tip of tail about five inches. Go to **127**.

126. Head and shoulders very large, so that the bird looks like a pygmy. Bird with us in summer. **Least Flycatcher, Either Sex.** (p. 134.)
Head and shoulders not especially large. Bird with us in spring and fall only. **Ruby-crowned Kinglet, Female.** (p. 48.)

127. Head bluish gray; throat white; sides of belly yellow. **Blue-headed Vireo, Either Sex.** (p. 83.)
Head brown; throat gray; sides yellowish gray; bird about six inches long from crown to tip of tail. **Wood Pewee, Either Sex.** (p. 135.)
Head brown or blackish; throat gray; sides brownish; bird about six inches and a half from crown to tip of tail. **Phœbe, Either Sex.** (p. 136.)

128. Upper parts greenish gray; under parts very light, almost white; eye with light line above it. Go to **129.**

Upper parts brown; under parts brownish gray; no line above eye. Go to **130.**

129. Light line extending back a considerable distance beyond the eye; sides of belly grayish white. **Red-eyed Vireo, Either Sex.** (p. 87.)

Light line stopping directly above the eye; sides of belly yellowish gray. **Warbling Vireo, Either Sex.** (p. 85.)

130. Bird about the size of an English sparrow; beak broad, black. **Phœbe, Either Sex.** (p. 136.)

Bird considerably smaller than an English sparrow, beak conical, darker above, lighter below; bird obscurely mottled. **Indigo Bunting, Female.** (p. 97.)

131. Bird larger than a robin; upper parts and breast-band gray-blue. **Belted Kingfisher, Either Sex.** Go to **22.**

Bird smaller than a sparrow; swallow-like; upper parts and breast-band sooty brown. **Bank Swallow, Either Sex.** (p. 90.)

132. Wings and tail almost or quite black; tail with white blotches; body either a clear gray (male) or a brownish gray (female). **Northern Shrike, Either Sex.** (p. 88.)

Wings and tail not strongly contrasting in color with the upper parts. Go to **133.**

133. Birds in the habit of carrying the tail cocked. Very small. Go to **90.**

Birds not in the habit of carrying the tail cocked. Not very small. Go to **134.**

134. Bird swallow-like. **Purple Martin, Female.** (p. 93.)

Bird with legs bare above the first joint, and fitted for wading. **Solitary Sandpiper, Either Sex.** (p. 153.)

Bird not like either of the above. Go to **35.**

135. Wing with white bars. **Pine Warbler, Female.** (p. 73.)

Wing without white markings. Go to **136.**

136. Bill with upper and lower mandibles crossing like the blades of a pair of scissors. Birds seen in southern New England only in winter. **American Crossbill, Female.** (p. 119.)

Bill of the ordinary pattern. Birds seen in New England only in the warmer months. Go to **137.**

137. Bird distinctly larger than a sparrow. **Cowbird, Female.** (p. 128.)

Bird considerably smaller than a sparrow. **Indigo Bunting, Female.** (p. 97.)

Bird much of the size and general coloration of a sparrow. Go to **138.**

138. Throat with white spot sharply marked off from general gray of breast. **White-throated Sparrow, Either Sex.** (p. 111.)

Throat without such a white spot. **Swamp Sparrow, Either Sex.** (p. 102.)

139. Back not mottled. Go to **140.**

Back mottled with shades of gray, brown, or blackish. Go to **146.**

140. Wing with two white bars; brown of a bright reddish cast; tail very long; bird rather larger than a robin. **Brown Thrasher, Either Sex.** (p. 62.)

Wing without white bars; brown not of a bright reddish cast; tail of moderate length; bird distinctly smaller than a robin. Go to **141.**

141. Bird about as large as a sparrow or larger. Go to **142.**

Bird distinctly smaller than a sparrow. **Water Thrush, Either Sex.** (p. 67.)

142. Upper parts olive-green; crown with orange-brown spot. **Oven Bird, Either Sex.** (p. 68.)

Upper parts of some shade of brown; no crown patch. Go to **143.**

143. Upper parts of uniform tint; spots of breast rather small and somewhat ill-defined. Go to **144.**

Back not of uniform tint; head and tail of differing shades; spots of breast large and sharply defined. Go to **145.**

144. Upper parts of a somewhat reddish brown; throat with a tinge of buff. **Wilson's Thrush, Either Sex.** (p. 45.)

Upper parts dark brown without any reddish tinge; throat and breast somewhat yellowish. **Olive-backed Thrush, Either Sex.** (p. 44.)

145. Head and back tawny brown, shading into olive on rump; white of under parts pure. **Wood Thrush, Either Sex.** (p. 46.)

Head and back olive-brown, becoming tawny on the tail; breast often yellowish white. **Hermit Thrush, Either Sex.** (p. 43.)

146. Beak slender and an inch or more long; legs bare for some distance above the first joint. **Spotted Sandpiper, Either Sex.** (p. 152.)

Beak not more than half an inch long; legs not bare above the first joint. Go to **147.**

147. White markings somewhat conspicuous on head, wings, throat, or tail. Go to **148.**

No white marking. Go to **149.**

148. Head with three longitudinal white stripes; wings spotted with white. **Rose-breasted Grosbeak, Female.** (p. 99.)

Outer tail-feathers largely white, showing when the bird flies; no white wing-bars. **Vesper Sparrow, Either Sex.** (p. 113.)

149. Under parts very light; spots dark and sharply marked. Go to **150.**

Under parts grayish; spots not very dark, and gradually shading into the general breast-color, so that they are less conspicuous than in the first group. Go to **152.**

150. Brown of a dull, somewhat grayish, tinge. Go to **151.**

Brown of a warm reddish tinge. **Fox Sparrow, Either Sex.** (p. 101.)

Brown of a very dark shade, almost black; bird considerably larger than a sparrow. **Red-winged Blackbird, Female.** (p. 127.)

151. Centre of the breast with a dark spot considerably larger than the others; no yellowish suffusion about the head. **Song Sparrow, Either Sex.** (p. 104.)

Breast without any especially large dark spot; slight yellowish suffusion in front of eyes. **Savanna Sparrow, Either Sex.** (p. 112.)

152. Middle of breast without streaks; forehead with obscure reddish patch; bird distinctly smaller than a sparrow. **Redpoll, Female.** (p. 117.)

Entire breast streaky; no reddish head patch; bird about the size of a sparrow. **Purple Finch, Female.** (p. 120.)

153. Upper parts black; sides of breast and belly chestnut. **Towhee, Male.** (p. 100.)

Upper parts blue; under parts entirely chestnut. Go to **154.**

Upper parts brown; under parts either wholly or partly brown. Go to **155.**

154. Blue very dark, almost black; bird swallow-like. **Barn Swallow, Either Sex.** (p. 92.)

Blue not very dark; bird not swallow-like. **Bluebird, Either Sex.** (p. 39.)

155. Upper parts dull brown; under parts chestnut. **American Robin, Either Sex.** (p. 41.)

Upper and under parts of almost the same color throughout — a dull, sooty brown. **Chimney Swift, Either Sex.** (p. 143.)

Throat and breast of the same color as the upper parts. Go to **156.**

156. Upper parts, throat, and forebreast of a dull brown; sides of belly chestnut; tail with white blotches. **Towhee, Female.** (p. 100.)

Head and back clear brown, passing into slate on rump; head and throat of the same color, passing into yellowish on belly; tail edged with yellow, but without white blotches. **Cedar Waxwing, Either Sex.** (p. 89.)

VIII. WHITE

FORMING CONSPICUOUS MARKINGS, OR ENTERING LARGELY INTO THE COLOR OF THE UPPER PARTS.

157. Collar white. Go to **158.**

Rump white. Go to **159.**

Tail showing white feathers in flight. Go to **161.**

Tail with white edge. **Kingbird, Either Sex.** (p. 139.)

Throat white. **White-throated Sparrow, Either Sex.** (p. 111.)

158. Bird larger than a robin; upper parts slate-blue; under parts white. **Belted Kingfisher, Either Sex.** Go to **22.**

Bird smaller than a robin; almost entirely black. **Bobolink, Male.** (p. 129.)

NOTE. — The collar is really buff, but often looks white as the bird flies.

159. Bird larger than a robin. **Flicker, Either Sex.** Go to **7.**

Bird smaller than a robin. Go to **160.**

160. Bird mostly black. **Bobolink, Male.** (p. 129.)

Bird mostly a dull gray. **White-winged Crossbill, Female.** (p. 118.)

NOTE. — The rump is really yellowish, but often looks white.

Bird largely white, with a good deal of black on back, wings, and tail; both the black and the white of the upper parts is more or less overcast with brown. **Snowflake, Either Sex.** (p. 114.)

161. Bird about the size of an English sparrow. Go to **162.**

Bird considerably larger than an English sparrow. Go to **163.**

Bird considerably smaller than an English sparrow. Numerous warblers.

162. General coloring sparrow-like. **Vesper Sparrow.**

General color slate. **Black Snowbird.** (p. 105.)

163. Under parts chestnut. **American Robin, Either Sex.** (p. 41.)

Throat and forebreast black; sides chestnut. **Towhee, Male.** (p. 100.)

Throat and forebreast dull brown; sides chestnut. **Towhee, Female.** (p. 100.)

Under parts white. Go to **164.**

164. Wings with white markings. **Snowflake, Either Sex.** (p. 114.)

Wings without white markings. Go to **108.**

LAND BIRDS

FAMILY TURDIDÆ

1. BLUEBIRD (*Sialia sialis.*)

Upper parts bright blue; under parts chestnut, shading into white on the belly. Beak rather long and slender, black; feet black. Bird a little larger than a sparrow. Sexes alike, but female duller.

THIS best loved of all our birds may be found in orchards and gardens, in the neighborhood of dwellings, and among scattered trees. A favorite perch is a fence-post.

> *The bluebird, shifting his light load of song,*
> *From post to post along the cheerless fence.*
>
> LOWELL.

It is one of our earliest spring visitors, coming in early March, or sometimes even in February, and tarrying until November, while a few may winter in sheltered places. Its familiar, confiding ways and conspicuous coloring make it almost as well known as the robin.

Yonder bluebird, with the earth-tinge on his breast,
and the sky-tinge on his back. — BURROUGHS.

The nest is usually placed in the hole of a tree or post, or in a bird box. The first eggs are laid about the beginning of May, and there are two or three sets. The same nest is repaired and used for the second family; and the little parents, if kindly treated, will return year after year to the same spot.

The familiar call of the bluebird is a soft cry which has been translated into the word "Bermuda, Bermuda." This note may be heard in the spring for a day or two before the bird can be seen. Besides it, he has a simple warble, uttered with open, quivering wings, which is very tenderly attractive. He sings from the time of his arrival until about midsummer, then becomes silent, but resumes his song (in the neighborhood of New York, at least) in mid-September, continuing it until the end of October.

LITERATURE:

In Nesting-Time. — OLIVE THORNE MILLER.
Little Brothers of the Air. — IBID.
Wake-Robin. — JOHN BURROUGHS.

2. AMERICAN ROBIN (*Merula migratoria.*)

Upper parts grayish brown, head darker; under parts in general chestnut; throat spotted black and white; tail with small white blotches on outer feathers. Beak long and rather slender, yellow; feet dark. Length from top of head to tip of tail about ten inches. Sexes similar, save that the female is duller.

This most familiar of all our native birds is to be found everywhere except in deep woods. He is, generally speaking, a summer resident, coming to us in early March and remaining until October. A few, however, spend the entire year; they should be sought in winter in such swampy woods as furnish at once protection against the weather and the possibility of food. At this season the birds live chiefly upon berries, but during the rest of the year the food consists largely of earth-worms; and it is an interesting sight to watch a robin hopping over the lawn, listening for the worm, and finally dragging it out of its hole. Robins also destroy vast numbers of injurious insect larvæ, which they collect as food for their young ones.

When they first arrive they live in loose flocks, and after the breeding season is over they resume the habit. At this time they assemble in great companies to pass the nights together at some favorite spot, going their various ways in the morn-

ing, to return again at nightfall. Of these so-called "robin roosts" a large one exists in Melrose.

The nest is built in very various places; shrubs, vines, and trees, especially evergreens. Sometimes not more than three feet from the ground, it has been known to be as much as fifty. Eggs are laid about the first of May, and there are two, or even three sets.

The notes are all simple, but various, so that one can tell a robin's song rather by the quality of the voice than by the exact notes. The bird usually chooses the very top of the tree for his stage, and sings as energetically in cloudy and even rainy weather as in the sunshine. His song has been thus paraphrased:

"In the sunshine and the rain
I hear the robin in the lane
Singing, 'Cheerily,
Cheer up, cheer up,
Cheerily, cheerily, cheer up.'"

Bicknell states that in the vicinity of New York robins often do not begin to sing until some time after their arrival. Song continues until mid-July, and with waning vigor through August. September is a silent month; but the heart to sing comes back with its closing day, and the robin is nearly as tuneful in October as in the spring.

LITERATURE:

Pepacton. (Art. "Notes by the Way.") — BURROUGHS.
Birdways. (Art. "A Bird of the Morning.") — O. T. MILLER.
A Naturalist's Rambles. (Art. "A Short Study of Birds' Nests.") — C. C. ABBOTT.
The Footpath Way. (Art. "Robin Roosts.") — BRADFORD TORREY.
Summer Robin Roosts. — BREWSTER. "The Auk," vol. vii.

3. HERMIT THRUSH

(*Turdus aonalaschkæ pallasii.*)

Head and back olive brown, passing into reddish brown on the rump, and especially on the tail; throat and forebreast yellowish white, thickly marked with large, dark, angular spots; remaining under parts light olive on the sides and white in the middle. Beak slender, black; feet brown. Bird considerably larger than a sparrow. Sexes similar, save that the female is a little smaller.

THIS exquisite bird may be sought in woods, whether swampy or dry, and also along wooded roadsides. It is ordinarily to be found in the neighborhood of Boston only in the last half of April and again in October. In the spring it is found mostly on the ground and in low underbrush; in the fall it is more upon the trees.

Breeding takes place in northern New England, in the higher parts of central and western Massachusetts, and upon Cape Cod. The nest is almost always placed upon the ground, usually on a sunny, wooded bank in the neighborhood of a swamp. Eggs are laid early in June, and there are often two sets.

The hermit thrush is the most exquisite of all our singers; but his music is rarely to be heard with us, for he is usually silent except in the summer, although he has been heard to sing during both spring and fall migrations. His song has been described by Burroughs, "'O spheral, spheral, O holy, holy: O clear away, clear away, O clear up, clear up,' interposed with the finest trills and the most delicate preludes." There is said to be about it a peculiar spiritual quality lacking in the song of any other bird.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.

4. OLIVE-BACKED THRUSH

(*Turdus ustulatus swainsonii.*)

Upper parts of a uniform olive brown; under parts grayish white, passing into pure white on the middle of the belly and pale olive on its sides; throat and breast thickly marked with rather small dusky spots except on the middle of the throat, where they are entirely absent. Beak slender, the upper mandible dark, and the lower one dark at the tip and yellow at the base; feet brown. Bird rather larger than a sparrow. Sexes similar, save that the female is usually a little smaller.

The olive-backed thrush should be sought among woods, in orchards, or along swampy roads. It spends the latter part of May in the vicinity of Boston, passes on to northern New England to

breed, and returns again about the end of September. In the fall they are less shy than in the spring, and are more likely to be found upon the ground.

The nest is placed in a low tree or a bush not more than ten feet from the ground, and often much less. Eggs are laid somewhat before the middle of June, and there are often two sets.

Like the hermit, the olive-backed thrush usually sings only in his summer home; Bicknell states, however, that he may be heard during the spring migration. The song is said to be "sweet, clear, and liquid," but less varied than those of our other thrushes.

5. WILSON'S THRUSH, VEERY

(*Turdus fuscescens.*)

Upper parts a uniform shade of somewhat tawny brown; forebreast and sides of throat buff, marked with small brown arrow-heads which blend so with the general color that at a few rods distance the breast seems of a dull uniform buff; middle of throat white; remaining under parts pale olive gray. Beak large, slender, upper mandible dark, lower one pale; feet pale. Bird rather larger than a sparrow. Sexes similar, save that the female is smaller.

THE veery is the most common of our thrushes, and may be sought on or near the ground in the neighborhood of swampy woods and among pine-

trees. He comes to us early in May, "usually with the first blossoms of the pear," and remains until the end of September.

The nest is commonly placed on the ground. Eggs are laid about the end of May, and there are sometimes two sets.

The song has a peculiar liquid quality by which it may readily be recognized, and, moreover, it seems to repeat constantly the syllables, "veery, veery." The bird sings most continuously in the evening, prolonging his music even after darkness has begun to fall. The song-period ends in early July, and knows no revival in the fall.

LITERATURE:

In Nesting-Time. — Olive Thorne Miller.
Little Brothers of the Air. — Ibid.

6. WOOD THRUSH (*Turdus mustelinus.*)

Head and back tawny brown, gradually shading into olivaceous on rump and tail; under parts pure white marked with scattered, sharply defined, somewhat triangular blackish spots, which tend to arrange themselves into longitudinal lines; cheeks dusky, streaked with white. Beak long and large, light brown, lower mandible with a pale base; feet pale. Sexes similar.

The wood thrush may be sought in woods of various kinds, especially in those which are low and damp. He comes to us early in May, and leaves again in September or October.

The nest is usually built in a low bush or tree, only a few feet from the ground; and a swampy place is especially likely to be selected. Eggs are laid about the end of May, and there is sometimes a second set.

The wood-thrush is one of our exquisite musicians. The song is usually delivered from the top of a tall tree, either in the early morning, or in the deepening dusk of evening; though, should the day be cloudy, he may be heard at other hours. The song is rich and various, and is almost impossible of translation into syllables. But among others the sound of Eolie, Eolie, in a peculiarly liquid tone, and followed by a trill, may often be noted. In the neighborhood of New York, the wood-thrush sings from the time of his arrival until about the middle of August, and, having ceased, does not again resume his music in the fall.

LITERATURE:

Birdways. — Olive Thorne Miller.

FAMILY SYLVIIDÆ

7. RUBY-CROWNED KINGLET

(*Regulus calendula.*)

Upper parts greenish olive; wings and tail dusky, edged with yellowish; wing with two whitish bars; under parts grayish or yellowish white. Crown with rich scarlet patch, which is wanting in the female. Bill slender and black; feet black. One of our smallest birds; about two-thirds as long as a sparrow.

This exquisite little creature abounds in wooded regions, in parks and gardens which contain cone-bearing trees. It associates in troops with chickadees and golden-crowned kinglets; but it merely passes through this region of the country on its way to and from its northern breeding grounds. It is here from mid-April to early May, and again from early October to mid-November. It is said to frequent in the spring chiefly the tops of trees, and in the fall the lower branches.

Breeding probably takes place in the extreme northern part of New Hampshire and Vermont, in the regions to the north of this, and also in the mountains somewhat farther south. The few nests which have been discovered have been found in

woodlands in cone-bearing trees, at a considerable height from the ground.

It is an exquisite songster; its "notes are clear, very loud, and prolonged, full of variety and purity." But, unfortunately, while with us, it has the habit of most birds of passage, and ordinarily restricts itself to a mere chirp; although, according to Bicknell, its song may be heard both in the spring and in the fall.

8. GOLDEN-CROWNED KINGLET
GOLDEN-CRESTED KINGLET

(*Regulus satrapa.*)

Male: upper parts olive-gray; under parts grayish white; wings and tail dusky, wing with two white bars; crown flame-color bordered with yellow, and this again with black; white line over the eye. Beak and feet small, dark. Bird less than half the size of a sparrow. Female: similar, but the crown yellow, bordered with black.

This tiny exquisite may be found at any time from the last of October to the first of May, although more abundant in spring and fall. So far as my observation goes, he is most likely to be found in evergreens, especially Norway spruces, but Minot speaks of finding him most abundantly among white birches. They ordinarily move about in small companies, made up not only of their own kind, but of other small birds. In spring they may

often be seen fluttering before some opening cluster of leaves, and gathering from it the insects which it has attracted.

The bird nests chiefly in northern New England, and farther north. Few nests have been described. Those found in Massachusetts were in the top of tall spruces; one discovered in the White Mountains was in a hemlock only about four feet from the ground.

With us the kinglets are almost silent; in their summer homes they have a song which, according to Brewster, "consists of a succession of five or six shrill, high-pitched, somewhat faltering notes, and ends with a short, rather explosive warble, as follows: Tzee, tzee, tzee, tzee, ti, ti, ter-ti-ti-ti-ti."

LITERATURE:

Breeding of the Golden-crested Kinglet. — BREWSTER. "The Auk," vol. v.

FAMILY PARIDÆ

9. CHICKADEE; BLACK-CAPPED TITMOUSE

(*Parus atricapillus.*)

Upper parts ashy; under parts rusty white; crown, nape, and throat black; cheeks white; quills of wings and tail white-edged. Beak and feet small, black. Bird rather less than two-thirds the size of a sparrow. Sexes similar.

THESE confiding and sociable little birds spend the entire year with us, but are most abundant in the winter, when the residents are re-enforced by others who have come from the north. As they are also less shy at this season, it furnishes by far the best time for studying them. I have found them most abundant among hemlocks, where they cling, often head downward, to the branches, picking out small insects which have lodged in cones and other parts of the tree. Minot speaks of finding them especially among pines and white birches. On hard wood trees they not infrequently cling to the trunks, and climb along the under side of large horizontal boughs somewhat after the fashion of creepers. They can readily be attracted to the window by cracked hickory nuts placed on the sill. They usually move in small companies, and are extremely sociable, not only among themselves, but with other

birds. A favorite winter amusement is to drop from a tree into the soft snow:

Flying low,
Prints his small impress in the snow.
EMERSON.

The nest is usually made in a post or tree, either in a cavity which has been found or in one made by the little parents themselves. Eggs are laid the last of May.

The commonest song is that which has given them their name; it resembles the syllables chick-a-dee-dee-dee. Besides this, there is another heard usually in the warmer days of winter and in spring. It consists of two sweet, clear notes of equal length, the second a fifth lower than the first, and sounds somewhat like the word phœbe. It is often mistaken for the note of the phœbe.

Thy call in spring,
As 'twould accost some frivolous wing,
Crying out of the hazel copse, Phe-be!
And in winter, Chic-a-dee-dee!
EMERSON.

The chickadee, according to Bicknell, "has also a short run of low, musically modulated notes, in fact, a short warble."

LITERATURE:

A Rambler's Lease. (Art. "A Bird's-nest Hunter.") — BRADFORD TORREY.

10. RED-BREASTED NUTHATCH
RED-BELLIED NUTHATCH
CANADA NUTHATCH

(*Sitta canadensis.*)

Male: upper parts bluish gray; wings and tail dark, the latter with white blotches; under parts in general rusty brown, lightest on the throat, very variable in shade; crown black, bordered in front and at the sides by a white stripe and this by a black stripe. Bill slender, pointed, dark. Feet horn-colored. Bird not quite two-thirds the size of a sparrow. Female: similar, but without the black crown.

THE red-breasted nuthatch is an irregular winter resident, sometimes abundant, sometimes nearly or quite absent. He comes to us in the early fall, and retires in April or May. He is much less common than his brother, the white-breasted nuthatch, but should be looked for especially among spruces. His habits render him readily recognizable, for he runs up and down the trunks of trees in search of insects which are lodged in the cracks. Spruce and pine seeds are also favorite articles of diet.

Breeding takes place in northern New England and in mountainous parts of Massachusetts. The nest is built in a hole dug in an old tree or stump.

The note resembles that of the white-breasted nuthatch, but is fainter and more musical.

LITERATURE: *Nesting Habits of the Red-bellied Nuthatch.* — HARDY. *Bull. Nuttall Club*, vol. iii.

11. WHITE-BREASTED NUTHATCH
WHITE-BELLIED NUTHATCH
CAROLINA NUTHATCH

(*Sitta carolinensis*).

Male: upper parts bluish gray; wings and tail dusky, the latter with white markings; head and nape black; under parts white. Beak long, strong, dark; feet horn-color. Bird a little smaller than a sparrow. Female: similar, but black of head imperfect or largely wanting.

The nuthatch is readily recognizable by its very short tail, and by its habit of running down as well as up tree trunks. "That little up-side-down bird" it has been called. It spends the whole year with us, but it is more abundant in the colder months than at other times. It may be found in mixed woods, especially where there are many old, decaying trees and stumps. It feeds chiefly on insects and larvæ, which it picks out from the crevices of the bark; but it is also fond of nuts, and may be attracted from the trees to a neighboring window by cracked hickory nuts spread on the sill.

The nest is built in open woodland at the bottom of a hole dug out in a dead tree or stump.

Its ordinary note is a harsh cry, somewhat resembling the syllables quank, quank.

FAMILY CERTHIIDÆ

12. BROWN CREEPER

(*Certhia familiaris americana*).

Upper parts mottled brown, black, and flaxen with a tawny tinge upon the rump; under parts grayish white. Beak very long, slender, and decurved, upper mandible dark, lower one light; feet slender, dark; tail with its quills pointed. Bird rather less than two-thirds the size of a sparrow. Sexes similar, save that the female is somewhat smaller.

This inconspicuous little bird spends the entire year with us, but is more abundant in spring and fall than at any other time, and more abundant in winter than in summer. At the latter season he frequents thick and sheltered woods, but in spring and fall he is to be found in open woodland or parks. He may be recognized as soon as seen, for he is the only little brown bird we have which has the habit of winding spirally up the tree trunks. Moreover, he often betrays his presence by a faint, lisping chirp, one of the weakest of all bird notes. It is difficult, however, to watch him; for if he suspects an observer he is very likely to dodge to the other side of the trunk. He is said to prefer trees with rough bark, which are more likely to harbor

the larvæ and minute insects on which he feeds. Minot speaks of his preference for the pine, and I have frequently found him on oaks of various kinds.

The nest is placed in deep woods, "behind a sliver of loose bark on a decayed tree or stub." Eggs are laid about the middle of May.

The song, which is rarely heard with us, is described by Brewster as consisting "of a bar of four notes, the first of moderate pitch, the second lower and less emphatic, the third rising again, and the last abruptly falling."

LITERATURE:

Breeding Habits of the American Brown Creeper. — BREWSTER. "Bulletin of the Nuttall Ornithological Club." 1879.

FAMILY TROGLODYTIDÆ.

13. LONG-BILLED MARSH WREN

(*Cistothorus palustris.*)

Upper parts in general brown, darker on the head; back with a triangular patch of black and white mottling; wings and tail marked with blackish; under parts grayish white in the middle, brownish on the sides. Bill very long and slender, lower mandible pale at the base; feet brown. Bird rather less than two-thirds the size of a sparrow. Sexes similar.

THE marsh wrens should be sought in such swampy regions as are destitute of trees and shrubs, but filled with reeds; and the swamps may be either salt or fresh water ones. The long-bill comes to us about the middle of May, and leaves again in October, but rarely or never goes farther north. He lives in colonies; and should his domain be invaded, he makes known his displeasure by an angry scolding which betrays the secret he desires to guard.

Their postures are sometimes very comical; a favorite attitude is with the tail thrown up until it almost covers the back and the head lowered. In this position they have a peculiar swaying motion, back and forward, as if they were on a pivot, and in this position they sing most frequently. Others may be seen scrambling like little mice up and down the

reed stems, or all over their globular nests. They appear among themselves to be excitable to the verge of irascibility, and not seldom quite beyond such moderate limit. — COUES.

The nest is hung among reeds, and the eggs are laid in early June. Like many other wrens, the males of this species appear to employ themselves with building a succession of nests, only a few of which are ever used.

The song is said by Nuttal to be "a sort of short, tremulous, and hurried warble." The first song-period ends (in the neighborhood of New York) early in August; but isolated songs may be heard later, and, according to Bicknell, there is reason to believe that, after the wren goes south, it has a second song-period.

LITERATURE: *Upland and Meadow.* — C. C. ABBOTT.

14. SHORT-BILLED MARSH WREN

(*Cistothorus stellaris.*)

Upper parts in general brown; head and back with more or less black and white mottling; wings and tail marked with blackish; under parts grayish white in the middle, brownish on the sides. Bill scarcely half as long as the head, slender; feet pale. Bird considerably less than two-thirds the size of a sparrow. Sexes similar.

THE short-billed marsh wren is to be found in open swamps and meadows; but he does not, like

the long-billed, frequent reed-flats. He is to be distinguished from the long-billed chiefly by his smaller size and his shorter bill. The habits of the two are much alike, save that the short-billed is shyer, and is said not to live in colonies. For a fuller account the reader is referred to the description just preceding this one. The bird comes to us about the middle of May, and leaves about the end of September.

The nest is placed on the ground in a tuft of grass in a swamp. Eggs are laid in early June.

The song is much like that of the long-bill.

LITERATURE: *Upland and Meadow.* — C. C. Abbott.

15. WINTER WREN (*Troglodytes hiemalis.*)

Upper parts brown, obscurely marked with dusky; throat, breast, and middle of belly whitey-brown obscurely mottled; sides of belly and crissum dark brown mottled with white. Beak slender, upper mandible dark, lower one pale; feet brown; tail much shorter than outstretched legs. Bird about half the length of a sparrow. Sexes similar.

This little creature, the smallest of our wrens, and almost the smallest of our birds, is generally to be seen here only in April, October, and November, on his way to and from his northern breeding-ground, although he summers at a few places in Massachusetts. He usually travels alone, and frequents woods

and wooded roads, busying himself in the search for food about logs and brush-heaps. He is not very common; and his small size, inconspicuous coloring, and retiring habits make him seem rarer than he is. He is best studied farther north, both because he is less shy on his breeding-grounds than during his migration, and because his song there calls attention to his presence.

The nest is placed at the foot of a moss-covered stump, under a tree, or in a pile of brush. He breeds in the White Mountains and farther north.

The song is both exquisite and brilliant, — wild, impassioned, and joyous, — one of the rarest of our sylvan melodies. The first song-period closes about the end of August; a second one begins about a month later, and continues until his departure for the South.

16. HOUSE WREN (*Troglodytes aëdon.*)

Upper parts brown, mottled with darker; under parts brownish or grayish, mottled with darker; breast usually darker than either throat or belly. Beak slender, pale; feet pale; tail about as long as the outstretched legs. Bird less than two-thirds the length of a sparrow. Sexes similar.

The house wren is a common summer resident of Massachusetts, but is rarely seen north of this State. Even in southern New England, though common,

he is very local. He comes to the neighborhood of Boston early in May, and leaves again in late September. He frequents exclusively cultivated grounds, gardens, and outbuildings, and has the usual wren characteristics —

> *Sprightly, fearless, and impudent little creatures, apt to show bad temper when they fancy themselves aggrieved by cats or people, or anything else that is big or unpleasant to them; they quarrel a good deal, and are particularly spiteful towards martins and swallows, whose homes they often invade and occupy.* — COUES.

The nest is built in a bird-box, or hole, in the neighborhood of an outhouse, often under the eaves. Eggs are laid early in June, and there are sometimes two sets.

The song, according to Minot, "consists of a few loud and sprightly notes, followed by a loud and very characteristic trill, which is its most prominent feature."

17. BROWN THRASHER; THRASHER BROWN THRUSH

(*Harporhynchus rufus.*)

Upper parts rich rust-brown; wing with two white bars; under parts yellowish white, marked, except on the throat, with large, well-defined dark brown spots. Beak large, dark, lower mandible with a yellow base; feet pale; tail very long. Bird about the size of a robin, though the extraordinarily long tail would make it measure more. Sexes similar.

This large and well-known songster comes to us about the first of May, and remains until mid-October. On his first arrival he may be found on cultivated estates; but he soon withdraws to the rough slopes clothed with small second-growth, which form his favorite dwelling-places. He may be recognized at a considerable distance, from his habit of flirting his tail while perched, much after the fashion of the catbird. And if one gets a nearer view, he may be distinguished from all other thrush-like birds by the two white wing-bars and the extraordinarily long tail. Unlike many birds, when the brown thrush arrives he is already mated; he travels with his spouse, but cares nothing for other company.

The nest is placed on or near the ground in a retired thicket or swamp. There are two sets of eggs; the first ones are laid usually about the end

of May, though sometimes as early as the second week. The devotion and bravery of the parents in caring for both eggs and young is unusual even among birds.

The song is loud, rich, and wonderfully varied, and is usually delivered from the top of a tall tree. And the bird is a most persistent singer, continuing for hours at a time. The first song-period ends near the close of June; a second one begins (in the neighborhood of New York) in early September, and continues nearly or quite a month. The fall song has, however, none of the spontaneity and vigor of the spring one, but is a low, rambling warble.

LITERATURE:

In Nesting-Time. — Olive Thorne Miller.
Little Brothers of the Air. — Ibid.

18. CATBIRD (*Galeoscoptes carolinensis.*)

Entire bird slate-gray; lighter below; crown and tail black; chestnut patch at the base of the under side of the tail. Beak long and rather slender, black; feet black. Bird a little smaller than a robin. Sexes similar.

This familiar bird comes to us with the pear-blossoms, about the first week in May, and leaves again in October. He may be sought in bushy places and open woods in the neighborhood of

water. He is more common near cultivated estates than in remote regions, and, though cautious and watchful, is by no means shy. He moves about easily and rapidly upon the ground, where he seeks the "cutworms," which form a considerable part of his food. When perched, he has an odd habit of flirting his tail, and of depressing it when he sings.

The nest is usually placed in a thicket; in my experience it is commonly near the water. Eggs are laid about the first of June, and there are sometimes two sets. If undisturbed, the bird returns year after year to the same nesting-place.

The notes of the catbird are familiar; the commonest one is a cat-like sound; but besides this he has a rich, varied, mellow song, which is said to be frequently marred or interrupted by the mimicry of others' notes. He sings from his arrival until the middle of August, but has no second song-period.

LITERATURE:

Birdways. — Olive Thorne Miller.

FAMILY MNIOTILTIDÆ

19. AMERICAN REDSTART (*Setophaga ruticilla.*)

Male: upper parts, throat, and middle of breast black; wings dark, with irregular bar of reddish orange; tail with two blotches of reddish orange near base; under surface of wings and sides of body of the same color; belly white. Beak rather long and slender, black; feet dark. Bird about two-thirds as large as a sparrow. Female: upper parts olive; lower parts grayish white; wings dusky, with yellow bar; tail with yellow blotches near base; under surface of wings and sides of body yellow.

This exquisite gem of the woodlands is to be found especially on the wooded borders of swamps and meadows, being attracted there by the flying insects which constitute its food. Its habit of constantly opening and closing its tail as it flies, renders it even more conspicuous than it would otherwise be. In Wellesley it is by no means a timid or an uncommon bird; it arrives in early May, and leaves again in late September.

The nest is placed in a fork of a shrub or small tree. The eggs are laid about the first week in June.

It has the twittering notes and the incessant motion characteristic of the warblers, but I have been unable to mark any distinctive peculiarity in either flight or note. It is sometimes silent in

July, singing again in August; and sometimes sings through July, and has no supplementary song-period.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.

20. MARYLAND YELLOWTHROAT

(*Geothlypis trichas.*)

Male: upper parts olivaceous; forehead and cheeks black; throat and breast yellow, shading into yellowish gray on belly. Beak slender, dark; feet light brown. Female: similar, but duller, and without the black forehead and cheeks.

This beautiful bird, which is one of our most abundant warblers, should be sought in low ground which lies near the water and is overgrown with bushes. It seems ordinarily to prefer tangles where there are no high trees. According to Minot, on its first arrival it spends much of its time in trees, often in parks, only later betaking itself to lower ground. It is usually seen on or near the ground, and has the habit of constantly moving its tail, both when it is in the bushes and while on the earth. It comes to us by the middle of May, and remains until the first of October.

The nest is usually placed on the ground beside a brook or in a swamp; it is occasionally, however,

built in a thicket. Eggs are usually laid about the end of May; there are always two and possibly sometimes three sets.

These birds sing more or less all day. The most characteristic notes resemble the syllables "witchity, witchity, witchity," sometimes varied to "wee-chee-chee-wee," and again to a song much like that of the yellow warbler. Especially in August the bird sings during flight; but the notes are quite unlike the characteristic music, the entire flight-song being thus described by Bicknell: "And as the ordinary song with which it begins comes to an end while yet the bird is in the air, the time is filled out by a disarranged medley of notes very different from the usual utterance."

These song flights oftenest occur in the late afternoon or toward evening.

21. WATER THRUSH (*Seiurus noveboracensis.*)

Upper parts dark olive-brown, with a yellowish line above the eye; under parts sulphur yellow, heavily streaked with dark brown. Beak long, dark; the feet are said by Coues to be dark, but they are at least occasionally light brown. Sexes indistinguishable.

THE water thrush is to be sought in swamps and on the borders of brooks, ponds, and small lakes. It comes to us in late May for a brief visit, and again in early August for a stay of a couple of

months, and a few remain through the summer. At migration times it is not especially shy, and may readily be approached. It is almost always on the ground, where, unlike most birds, it walks instead of hopping. Another peculiarity is its habit of jerking its tail upward with every few steps. Still another unusual habit is that of wading in the shallows, where it seeks aquatic insects.

The nest is usually built on or near the ground in the neighborhood of water, but at this season the bird is very shy. Eggs are laid about the first of June.

The song is described by Coues as "beginning with a sudden, almost startling, burst of melody that . . . keeps falling till the slightest breath of air may blow the rest away."

According to Bicknell, the bird is in full song during the spring migration, and is ordinarily, though probably not invariably, silent in the fall.

22. OVEN BIRD; GOLDEN-CROWNED THRUSH

(*Seiurus aurocapillus.*)

Upper parts uniform olive-green; crown with orange-brown patch bordered on the sides with black; under parts white, breast and belly marked with large dark-brown spots. Beak and feet pale. Bird nearly the size of a sparrow. Sexes similar.

This pretty and attractive little bird comes to us early in May, and leaves us again in late Septem-

ber. He may be found in almost any deep wood, but perhaps prefers pine groves. He is usually found upon the ground, and may be readily recognized from his habit of walking instead of hopping, and jerking his tail up and down as he goes.

The nest is placed upon the ground in the woods; and the top is often completely roofed over, whence the name oven bird. Eggs are laid about the first of June.

The oven bird has two songs; the first is a common chant delivered from the ground or a low bush, which resembles the words "teacher, *teacher*, TEACHER, TEACHER, TEACHER, TEACHER!" each repetition being louder and more energetic than the last. This song may be heard all day long; but the other and far rarer one is poured forth usually after sundown, and while quivering in the air. Burroughs thus describes it: —

> *Mounting by easy flights to the top of the tallest tree, he launches into the air with a sort of suspended, hovering flight, like certain of the finches, and bursts into a perfect ecstasy of song — clear, ringing, copious, and rivalling the goldfinch's in vivacity, and the linnet's in melody. This strain is one of the rarest bits of bird melody to be heard, and is oftenest indulged in late in the afternoon or after sundown. I think this pre-eminently his love-song, as I hear it oftenest about the mating season.*

Bicknell states that in the neighborhood of New York the song is continued nearly through the month of July, and that for a few days, somewhere between the ninth of August and the fifth of September, it may be heard again in the early morning hours, though at this season it never reaches the precision and vigor of the true spring song.

23. PRAIRIE WARBLER (*Dendroica discolor*.)

Upper parts olivaceous; back with a patch of brick-red spots; cheeks and under parts bright yellow, marked along the sides with black; tail with white blotches; wing with two very indistinct yellow bars. Beak and feet slender, light brown. Bird little more than one-half the size of a sparrow. Sexes similar.

This tiny warbler is to be sought in rocky pasture-lands and scrub, where it may be found from mid-May to September. It is one of the most retiring of the warblers, and would be likely to pass unnoticed, but for its flycatcher-like habit of darting into the air to capture passing insects.

The nest is placed in a bush or small tree only a few feet from the ground. It usually contains eggs about the first of June.

> *The note is very quaint and characteristic; it consists of a monotonous and prolonged reiteration of single notes, rising in the scale from beginning to end, and growing louder and faster as it proceeds.*
>
> Stearns and Coues.

24. BLACK-THROATED GREEN WARBLER

(*Dendroica virens.*)

Male, in summer: upper parts yellow-olive, dullest on rump; cheeks yellow; throat and breast black; remaining under parts whitish, streaked with black on the sides; wings and tail dark brown; wing with two white bars; tail with white blotches. Beak slender and dark; feet dark. Bird rather more than half the size of a sparrow. Female and male in fall plumage: similar, but black interrupted or obscured.

THESE charming birds are to be found especially among pines. They begin to arrive early in May, and for a few days about the middle of the month are very abundant, after which time a large proportion of them pass northward. A considerable number, however, spend the entire summer, leaving only in early October.

The nest, like that of the pine warbler, is placed high in a pine-tree, near the end of a bough, and may be built any time from the first to the last of June.

The song is said by Burroughs to consist of "two sweet, silvery notes in the same pitch of voice and quite unaccented, followed by notes wherein tone and inflection are changed."

25. YELLOW PALM WARBLER
YELLOW RED-POLL

(*Dendroica palmarum hypochrysea.*)

Upper parts olive, streaked with dark on head and neck, becoming brighter on rump; under parts yellow, somewhat streaked with dark; wings and tail dark, tail with white blotches. Male in spring with a chestnut cap. Beak and feet slender and dark. Bird rather less than two-thirds the size of a sparrow. Sexes similar.

The yellow palm warbler comes to us in late April, spending about two weeks on his northward way, and appears again in the latter part of September. His favorite haunt is in the neighborhood of a swamp; but he may also be found about bushy woodland borders, and even in ploughed land, gardens, and orchards. They are usually found on the ground and in small companies. They are most readily distinguished from other warblers by a habit of jerking or flirting the tail, especially when on a perch.

The nest is said to be placed on the ground, but the bird in this region does not nest south of Maine.

The notes are weak and not characteristic.

26. PINE WARBLER
PINE CREEPING WARBLER

(*Dendroica vigorsii.*)

Male: upper parts yellow-olive; wings and tail brown, wing with two light or white bars, tail with large white blotches; throat and breast bright yellow, sometimes obscurely streaked; belly white. Female: similar but much duller, and with breast more distinctly marked, "sometimes nearly olive-gray above and sordid whitish below."—*Coues.* Beak long and slender, dark in male, lighter in female; feet dark brown in male, light brown in female. Bird about two-thirds the size of a sparrow.

THE pine warbler is the first of the warblers to appear in the spring. He arrives early in April, and leaves again only late in September, sometimes even lingering into October. In spring and fall he may be found in mixed woods, but in the summer he is to be sought among tall pines. In seeking the insects on which he lives he often scrambles about on tree trunks and among the larger branches, somewhat after the fashion of a creeper. In spring and fall, however, he finds a considerable part of his food on the ground.

The nest is usually placed in a pine, from twenty to fifty feet above the ground. The eggs are laid about the first of June. The song, according to Minot, "is apparently a delicately trilled whistle, but really a series of fine notes, as is proved by the fact that the birds open and shut their bills whilst emitting the sound."

27. BLACKBURNIAN WARBLER

(*Dendroica blackburniæ.*)

Male: upper parts black, with white markings on wings and tail and on back; crown, cheeks, throat, and forebreast flame-colored; remaining under parts yellow-white, streaked along the sides with black. Beak slender, dark. Female: upper parts brownish olive streaked with black; throat and forebreast dull orange or yellow; remaining under parts yellow-white streaked with black; wings dusky, with two white bars; tail with large white blotches.

This exquisite being is said to be abundant at times among spruces and hemlocks and in mixed woods. It is, however, extremely local, and I am not aware that it is to be found in Wellesley. It passes through southern New England in late mid-May and again in September, although a few remain to breed in Massachusetts.

The nest is usually placed in coniferous woods, on the horizontal bough of a pine or hemlock, at a considerable distance from the ground.

The song is very simple, consisting merely of five or six loud notes.

28. CHESTNUT-SIDED WARBLER

(*Dendroica pensylvanica.*)

Upper parts streaked with black and pale yellow or whitish; crown clear yellow, bordered on each side with black which extends down into a small patch in front of the eye; under parts in general white, but the sides of a rich reddish brown; wings and tail dusky, tail with white blotches, wings with two white bars which are more or less confluent. Beak slender, dark; feet brown. Bird about two-thirds the size of a sparrow. Sexes similar, save that the female is duller, and may want the black markings on the head.

The chestnut-sided warbler is a summer resident, coming to us early in May, and leaving us in September. During migration they may be found in open mixed woods and thickets; for the summer they retire to moist woodlands and swampy thickets. They are most likely to be met at the time of the spring migration.

The nest is placed in the fork of a bush or small tree; and the eggs are laid about the first of June.

The song is simple; one variation is almost exactly like the song of the yellow warbler. Another consists of half a dozen notes each higher than the preceding, except in the case of the last, which is lower than the one preceding it.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.

29. MAGNOLIA WARBLER
BLACK AND YELLOW WARBLER

(*Dendroica maculosa.*)

Upper parts in general black, often more or less mixed with olive; rump yellow; head ash; wings dusky, with a broad white patch across them; tail black, with large white spots on the bases of the feathers; under parts bright yellow, all except the throat and the very middle of the breast heavily streaked with black. Beak and feet dark. Bird rather less than two-thirds as large as a sparrow. Sexes similar, save that the black of the back is more likely to be mixed with olive in the female.

THE magnolia warbler is to be sought especially in willow thickets, near streams and other damp places; but they frequent also orchards and woodlands, especially evergreens. They come to us in the latter part of May, and remain for about two weeks. The return is made during September, and only a few birds pass through eastern Massachusetts, the bulk of them taking a more westerly route.

The nest is usually built in a low spruce, often only a few feet from the ground, and is finished early in June.

The song is not characteristic.

30. MYRTLE WARBLER
YELLOW-RUMPED WARBLER

(*Dendroica coronata.*)

Male: upper parts in general slate-color streaked with black; wings and tail dusky, wing with two white bars, tail with white blotches; rump and crown yellow; throat and belly white; breast white, heavily marked with black, and with a yellow patch on each side. Beak long, slender, black; feet black. Bird about two-thirds the size of a sparrow. Sexes similar, save that in the female the slate-color is sometimes quite brownish.

This charming bird may be found in little companies of five to ten among shrubbery and orchards, and on the edges of woods and swamps. It is a migrant, and tarries with us from late April to late May, coming again in the latter part of September for a stay of about a month. At these times it is, perhaps, the most abundant of all the warblers. In the spring they are found mostly in the trees; in the autumn they are more upon the ground. According to Minot "they may generally be distinguished at a distance by their habit of being much in the air, and of taking long flights (as compared with those of other warblers) at quite a distance above the ground."

Breeding takes place in the higher parts of Massachusetts, in the White Mountain region, and farther north; the nest is usually placed in a bush.

The birds, according to my observation, rarely sing during migration; but Minot speaks of having often heard them sing in May throughout the day.

31. SUMMER WARBLER; YELLOW WARBLER GOLDEN WARBLER SUMMER YELLOW BIRD

(*Dendroica æstiva.*)

Male: upper parts greenish yellow, becoming pure yellow on head; wings and tail dusky, each feather edged with yellow; under parts yellow, breast somewhat streaked with orange-brown. Beak long and slender, almost black; feet light brown. Bird rather more than half the size of a sparrow. Female: similar, but paler, and orange-brown streakings nearly or quite wanting.

This beautiful little creature is to be found everywhere, in woodlands, parks, gardens, and even in city streets; its abundance, brilliant color, and familiar habits make it one of the best known of our smaller birds. I have found it most abundantly in the tops of willows which grow on the swampy margin of a lake. It comes to us in early May, and leaves at the very end of September.

The nest may be placed in a fruit or a shade tree, when it is built at some distance from the ground; but it is more commonly found in thickets, in low, moist situations. The eggs are laid about the first of June.

The song is simple and not especially characteristic. Minot represents it by the syllables wee-chee-wee-chee-wee-i-u. He sings from the time of his arrival to his departure, but less frequently after the middle of July.

32. PARULA WARBLER
BLUE YELLOW-BACKED WARBLER

(*Compsothlypis americana.*)

Upper parts in general gray-blue; back with greenish yellow patch; wing with two white bars; tail with white blotches; throat and forebreast yellow crossed by a band of brown; remaining under parts white. Beak long and slender, upper mandible dark, lower one light; feet horn colored. Bird about half the size of a sparrow. Sexes alike, but coloring of female less pronounced, and brown band sometimes almost wanting.

ABUNDANT in high, open woods, parks, and gardens, where the greenish-gray "moss," *Usnea barbulata*, or "old man's beard," is found. During migration it is one of the most numerous of all the warblers, and it is abundant, though local, all through the summer. It comes to us in May, and disappears in September. The nest is globular, with an entrance on the side, and is almost always built in a bunch of *Usnea*. It is usually placed in the woods, twenty or more feet from the ground, at the end of a bough.

The song, like that of most warblers, consists merely of a few faint chirping notes, constantly uttered while the bird is searching for its food.

33. NASHVILLE WARBLER

(*Helminthophila ruficapilla.*)

Male, in summer plumage: upper parts except the head yellow-olive, brightest on the rump; head ashy, with an inconspicuous crown patch of chestnut; under parts bright yellow. Bill long, slender, dark horn-color; feet slender, brown. Bird about half the size of a sparrow. Female, in summer plumage: similar, but ash of head less clear, and crown patch more obscure or even wanting.

NOTE. — In fall the ash of the head may, in both sexes, be largely olivaceous.

THE Nashville warbler, although quite a common bird, especially during the fall migration, is so inconspicuous as to be readily overlooked. In spring and fall it may be found among the upper branches in the bushy borders of woods, in shrubbery and orchards, and even about houses; but in summer it prefers high, dry, pine woods where there is a more or less dense undergrowth. It is common about the middle of May, and again in September; but a comparatively small number spend the entire summer with us.

The nest is said by Minot to be placed on the ground, either in some open part of the woods, or amongst the shrubbery of some southerly facing bank ; and the eggs are laid about the first of June.

The song has been represented by the syllables wee-see-wee-see-wit-a-wit-a-wit. According to Wilson it is not easy at first to distinguish the sound from that produced by an insect. He sings regularly during the spring migration, but not in the fall.

34. BLACK AND WHITE WARBLER
BLACK AND WHITE CREEPING WARBLER

(*Mniotilta varia.*)

Male: mottled black and white both above and below ; wing with two white bars ; tail with white blotches. Beak and feet slender, black. Bird about two-thirds the size of a sparrow. Female: similar, except that the under parts are almost entirely white.

This active little bird is abundant in woodland regions, and at migration time is to be found also in gardens and orchards. He is conspicuous both from his lack of shyness, and from his habit of scrambling about the trunks and larger branches of trees, whence his name of creeping warbler. He comes to us in early May and remains into September.

The nest is usually placed upon the ground in the woods, but is occasionally built in the hole of a tree. Eggs, in the vicinity of Boston, are laid about the end of May.

These birds are said by Minot to utter more distinct sounds, exclusive of song, than any other of our birds. The song itself is almost incessant, and may be represented by the syllables chi-chi-chi-che-che-chee. To this "a few sweet and musical notes are generally added in May and June." — MINOT. In the vicinity of New York song ceases about the end of June, or occasionally not until the end of July, and is resumed again about the middle of August for a period varying from a few days to two weeks.

FAMILY VIREONIDÆ.

35. BLUE-HEADED VIREO
SOLITARY VIREO
BLUE-HEADED OR SOLITARY GREENLET

(*Vireo solitarius.*)

Upper parts olive-green, passing into ash on the head; wings and tail brown; wings with two white bars; under parts in general white; sides of breast and belly greenish yellow. Beak broad and strong, dark; feet dark. Bird about two-thirds the size of a sparrow. Sexes similar.

The solitary vireo may be distinguished from other vireos at a glance by the bluish head. It is to be sought in woodlands, and therefore, though not very rare, is less well known than its relatives. It breeds usually in northern New England; it passes through Massachusetts on its way north in late April or early May, and returns in September or early October. It sometimes, however, remains to breed with us.

Its nest is said to resemble that of the yellow-throated vireo; it is always built in the woods, sometimes in swampy ones.

The song is said to be a musical mellow warble, and the bird sings all day long. This, however, is

only in the breeding season; during migration it is usually silent, although Bicknell records that it sometimes sings both in the spring and in the fall.

LITERATURE:

A Rambler's Lease (Art. "A Woodland Intimate.") — BRADFORD TORREY.

36. YELLOW-THROATED VIREO YELLOW-THROATED GREENLET

(*Vireo flavifrons.*)

Upper part greeenish olive, shading into ash on the rump; wings and tail dark brown; throat and breast yellow; remaining under parts whitish. Beak long, broad, and dark; feet dark. Bird about two-thirds the size of a sparrow. Sexes similar.

THE yellow-throated vireo is to be found in the very tops of tall trees in woods, parks, and gardens; he is said, however, to be a local bird. He comes in early May, and leaves again in late September.

The nest is placed in the fork of a horizontal branch at a moderate height, sometimes indeed not more than three feet from the ground; it may be found either in the woods or in more open country.

This vireo has a pleasant song which begins with clear mellow notes that have some resemblance to the syllables, geery, geery. He sings with especial vigor in the warmest weather, and like some of the

other vireos, does not restrict himself to morning and evening hours, but may be heard even at noonday. He is the only vireo who sings on the wing; and so in love is he with music that in the vicinity of New York at least, he does not intermit his melody until early September, while even after this time isolated songs may still be heard.

LITERATURE:

Nesting Habits of the Yellow-throated Vireo. — Goss, "The Auk," Vol. I.

37. WARBLING VIREO; WARBLING GREENLET

(*Vireo gilvus.*)

Upper parts olive-green; under parts grayish white with a tinge of yellow; a narrow white line above eye, which does not run back behind it. Beak and feet dark. Bird distinctly smaller than a sparrow. Sexes similar.

The warbling and red-eyed vireos are so similar that it is almost impossible to distinguish them by the eye when alive. The warbling vireo is, however, rather smaller than his brother, and is a far more beautiful singer. He may be sought among the higher branches of roadside trees, where he would be easily overlooked were it not for his music. He comes to us in early May, and leaves again in early September.

The nest is placed in an open pasture or shaded street, suspended from the fork of a high branch. The poplar and maple are said to be the favorite trees. Eggs are laid early in June, and there are sometimes two sets.

The song is exquisitely sweet, and is kept up all day long and well into the summer.

> *Its voice is not strong, and many birds excel it in brilliancy of execution; but not one of them all can rival the tenderness and softness of the liquid strains of this modest vocalist. . . . The warbling vireo forsakes the depths of the woodland for the park and orchard and shady street, where it glides through the foliage of the tallest trees, the unseen messenger of rest and peace to the busy and dusty haunts of men.*
>
> COUES.

Bicknell states that in the region of New York the first song-period may end in early July, or may be prolonged to mid-August. A second period begins in early September or the very end of August, and lasts for about a week.

38. RED-EYED VIREO ; RED-EYED GREENLET

(*Vireo olivaceous.*)

Upper parts olive-green ; under parts grayish white ; a broad white line above eye, running back for a considerable distance behind it. Beak and feet light brown. Bird distinctly smaller than a sparrow. Sexes similar.

The red-eyed vireo is the most common of all the vireos. The distinction between him and the warbling vireo has already been discussed (see above, No. 37). He is to be sought in high, open woods, in village streets, and in the clusters of trees in the neighborhood of houses ; he does not, however, spend his time so exclusively among the higher branches as does his brother. He comes to us early in May, and leaves again in September.

The nest is built at a moderate height, sometimes not more than four feet from the ground ; it is hung from a fork, usually near the end of a limb, and is placed either in the edge of the woods or in a shade-tree. The eggs are laid early in June, and there are sometimes two sets.

The song consists of a few notes repeated over and over again with little change or intermission. Indeed, the red-eyed vireo is our most voluble songster, keeping up his simple music all day long and all summer long. It "would be monotonous, were it not for its wonderful cheerfulness, energy, and animation." — Minot.

FAMILY LANIIDÆ.

39. NORTHERN SHRIKE; BUTCHERBIRD

(*Lanius borealis.*)

Upper parts clear gray, growing lighter on rump; wings and tail dark brown with white markings; under parts light gray, crossed by fine wavy lines of dark brown; side of head with dark bar below and behind the eye. Beak large, strong, and hooked, horn-color; feet black. Bird a little larger than a robin. Sexes similar, save that in the female the gray has a more or less brownish tinge.

The butcherbird comes to us as a very irregular but rather common winter visitor, and may be looked for any time between the first of November and the first of April. He may be found in any locality, perched usually on some point which gives him a good outlook, such as a telegraph pole or the top of a hedge. He owes his name to his habit of chasing and killing small birds, which he ordinarily impales on thorns or sharp twigs, and which he usually, though by no means always, returns to devour.

Breeding takes place only beyond the northern limits of New England, and the nest is built in a bush or a low tree.

The bird with us is ordinarily silent; but Thompson remarks that "in the warm days of March he may be heard singing on the top of some tall tree, a song that would do credit to a catbird," and Brewster likens his music to that of the thrasher.

LITERATURE:

Locusts and Wild Honey. (Art. "Birds and Birds.") — Burroughs.

FAMILY AMPELIDÆ.

40. CEDAR WAXWING; CEDARBIRD CHERRYBIRD

(*Ampelis cedrorum.*)

Head brown both above and below, shading into ash on wings and tail, and into yellow on the belly. A black band runs across the base of the bill, and back through the eye. There is a crest; though, as the bird may depress it, it is not always noticeable. Bill and feet medium, dark. Bird about half way in size between a robin and a sparrow. Sexes alike.

THESE birds are very irregular in their movements; but one may look with most hope of finding them among cedars, junipers, mountain-ash, and especially cherry-trees, as the fruits of these different trees attract them, serving them as food. They move in small flocks, except at the breeding-season, when they are in pairs. They may be found at any time during the year, but are most abundant in the warmer months.

The nest is usually placed in an orchard-tree or a cedar, at a moderate height above the ground. Eggs are laid in late June or early July.

They have no proper song, only a faint lisping note; but their dainty costume, and their exquisite courtesy one to another, render them more interesting than many a vocalist.

FAMILY HIRUNDINIDÆ.

41. BANK SWALLOW (*Clivicola riparia.*)

Upper parts dull brown, wings and tail somewhat darker; under parts grayish white, with a band of brown across the breast. Beak and feet very small, black. Bird about two-thirds as large as a sparrow. Sexes similar.

THE bank swallow may be sought between the first of May and the first of September in the vicinity of sandy banks. He never wanders far from his home; and as the ground in which he builds must be such as will not cave in, this habit renders him more local than he would otherwise be.

This swallow is the only one of the family which still retains its old nesting habits. It builds at the end of a burrow which it digs out in a sandbank, usually preferring the vicinity of water, but sometimes choosing a railway or road cutting. The bird is the most sociable of all our swallows; communities of three or four hundred sometimes live together. Eggs are laid in the latter part of May, and there are two sets.

The bank swallows are ordinarily more silent than other swallows, having only a few low twittering notes.

42. TREE SWALLOW
WHITE-BELLIED SWALLOW

(*Tachycineta bicolor.*)

Upper parts metallic blue-green; wings and tail dark brown; under parts pure white. Beak weak, black; feet small, dark. Bird rather smaller than a sparrow. Sexes alike, but female somewhat less lustrous.

THE tree swallow comes to us in early April, and remains until early October. He is to be found in cultivated districts, and sometimes in wild ones as well. He is especially common near water, for he obtains much of his food from the insects which are most abundant in such regions. Maynard remarks that they gather "upon the salt marshes during the latter part of August and first of September, literally by millions." They are less peaceable than other swallows; and, according to Wilson, they frequently fight in the air for a quarter of an hour at a time, particularly in the spring, all the while keeping up a low, rapid chatter. If kindly treated, they will become extremely tame, and the same pair will return year after year to the same premises.

The nest is ordinarily built in a bird-box, though in sparsely settled districts they still keep to the primitive habit of nesting in a hollow tree. Eggs

are laid in the latter part of May, and there are usually two sets. The first nest is thoroughly repaired, and used for the second brood.

The notes are merely a rapid chatter.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.
The Footpath Way. (Art. "The Passing of the Birds.") — Bradford Torrey.

43. BARN SWALLOW (*Chelidon erythrogaster.*)

Upper parts deep steel-blue; wings and tail blackish, the latter with white spots; under parts chestnut, generally deepest on throat. Wings very long; tail deeply forked. Beak and feet black, weak. Bird nearly as large as a sparrow. Sexes alike, but color of female less intense.

The barn swallow, as its name implies, is to be found chiefly in the neighborhood of barns and other outhouses, especially about those which have openings in the gables to permit passage, and rough rafters suitable for the attachment of nests. Like all swallows, they are readily recognizable from the sustained, skimming flight; and this species may be easily distinguished from all others by the deeply forked tail, a characteristic which is wanting to the young. They come to us in late April, and leave in early September. "The dandelion tells me when to look for the swallow." — Burroughs.

The nest is now placed on the beams or rafters of a barn or other similar building, although "swallow cave" at Nahant recalls the fact that other places were once utilized for this purpose. Eggs are laid in late May. There are often two sets.

The note is a twitter, often uttered by the bird when on the wing. Bicknell describes it as "a low chattering trill, often terminating with a clear liquid note, with an accent as of interrogation."

LITERATURE:

A Naturalist's Rambles. (Art. "Do Swallows Hibernate?")— C. C. Abbott.

44. PURPLE MARTIN

(*Progne subis.*)

Male: intense metallic steel-blue, both above and below, in old birds almost black; wings and tail blackish with blue reflections. Wings very long. Beak and feet weak, dark. Bird considerably larger than a sparrow. Female: upper parts dark brown with bluish tinge; under parts grayish brown mottled with darker; wings and tail dusky.

The purple martin may be found especially in the neighborhood of water, or skimming over its surface in search of the insects on which it feeds. Like all the swallows, it is constantly on the wing, and its sustained, graceful flight — "skating on the air" — serves at once to mark it as a member of the swal-

low family. It comes to us in early May, and stays until late August.

The nest is invariably built in a bird-house. Eggs are laid near the end of May, and there are occasionally two sets.

His usual note, peuo peuo peuo, is loud and musical; but is frequently succeeded by others more low and guttural. — WILSON.

FAMILY TANAGRIDÆ

45. SCARLET TANAGER (*Piranga erythromelas.*)

Male, in summer plumage: scarlet body; black wings and tail. Female and male in fall plumage: olive-green above; greenish yellow below; wings and tail dusky, edged with olive green. Beak large and strong, horn-colored; feet rather delicate, somewhat darker than beak. Bird about halfway in size between a robin and a sparrow.

THE tanager is a rather shy bird, which frequents the deeper parts of the woods. It is found in mixed woods and in oak growth. It comes to the neighborhood of Boston in the latter part of May, and leaves early in September.

The nest is usually placed in an oak-tree, from ten to thirty feet above the ground. Eggs are laid about the first of June.

The song is said to be loud, clear, and flute-like, resembling "somewhat that of a robin in its modulations, but shriller in tone, more hurried, and enunciated in a peculiar wavering style." It is, however, rarely heard; for the bird sings but a few weeks, and then only on warm, bright days.

LITERATURE:

Upland and Meadow. — C. C. ABBOTT.
In Nesting-Time. — OLIVE THORNE MILLER.
Little Brothers of the Air. — IBID.

FAMILY FRINGILLIDÆ

46. ENGLISH SPARROW; HOUSE SPARROW

(*Passer domesticus.*)

Male: upper parts gray streaked with black and bay; top of head gray, sides chestnut; wing with white bar; under parts gray; throat with black patch which extends back upon the forebreast. Beak strong, conical, brown; feet brown. Bird about five and a half inches long from top of head to tip of tail. Female: color in general similar but duller; the sides of the head are gray instead of chestnut, and the throat is of the same color as the other under parts.

This well-known bird is to be found only too commonly about the streets of towns and cities. It is most abundant and most easily watched in winter, when flocks of them are attracted to horse droppings for the sake of the undigested seeds to be found therein. A melancholy interest attaches to its gradual extension, not only westward, but into the more sparsely settled parts of the East. A few years ago, though abundant in the village, they were not to be found in the grounds of the college; while they are now sadly plentiful there. The birds are active, intelligent, and wary, and although very quarrelsome, seem to have some feeling for their kind. Mr. W. T. Hill tells of an experience when he was trying to net sparrows. One of them es-

caped and remained near, so that "on the approach of other birds, by cries of alarm, or by flying with them and leading them away, it succeeded in keeping almost every bird from the net." This lasted for upwards of an hour, until finally the little creature was shot.

Nests are built about houses, behind blinds, in street-lamps, and other similar places. They are said to begin nests even in the winter. There are four to six broods in a year, and five or six young in a brood.

The only notes are the chirps and twitterings which may be heard almost constantly.

LITERATURE:

Birdways. — Olive Thorne Miller.

47. INDIGO BUNTING; INDIGO-BIRD

(*Passerina cyanea.*)

Male: metallic greenish blue above and below; wings and tail dark, nearly black; bill conical; upper mandible dark, lower one horn-colored; feet black. Bird about two-thirds the size of a sparrow. Female: upper parts olive-brown; under parts whitish brown streaked with darker; wings dusky.

This brilliant little bird may be found on the edges of woods, and even in trees along the roadside. It is, however, not easy to observe, owing to

its habit of keeping in the top of a high tree when singing. Wilson speaks of finding it frequently perched on fences, but I have been less fortunate. The bird comes to us in mid-May, and leaves in late September.

The nest is built in bushes or open shrubbery, usually "in the centre of a low, thick bush." In one instance, at least, the same nest was repaired, and used for a succession of years. Eggs are laid about the end of May.

The indigo-bird sings all day, and continues his song nearly or quite through July.

> *Its song is not one continued strain, but a repetition of short notes, commencing loud and rapid, and falling, by almost imperceptible gradations, for six or eight seconds, till they seem hardly articulate, as if the little minstrel were quite exhausted; and, after a pause of half a minute or less, commences again as before.* — WILSON.

48. ROSE-BREASTED GROSBEAK

(*Habia ludoviciana.*)

Male: upper parts in the main black, often mottled with flaxen; rump white; tail and wings dark, variegated with white; under parts white; breast with a rose spot about the size of a half-dollar; under surface of wings rosy. Beak extremely large, conical, light horn color; feet medium size, dark. Bird considerably larger than a sparrow. Female: upper parts blackish brown streaked with olive and flaxen; head with a median white line, and one over each eye; under parts impure white, marked with dark brown spots; under surface of wings saffron-yellow.

This beautiful bird is found in heavily timbered regions, particularly near the water. It is said to be especially fond of dense undergrowth. I have usually found it in the very tops of tall oak-trees. It comes to us in mid-May, and leaves in early September.

The nests may be found in very various locations, in pasture lands, in damp woods, in trees or shrubbery of parks or gardens. They are usually placed at a moderate height above the ground. Eggs are laid commonly about the first of June.

It is one of our richest and most beautiful songsters, and is one of the few birds which occasionally sing at night. In the vicinitv of New York song continues until mid-August.

LITERATURE:

A Naturalist's Rambles. — C. C. Abbott.
In Nesting-Time. — Olive Thorne Miller.
A Rambler's Lease (Art. "A Bird's-Nest Hunter.") — Bradford Torrey.

49. TOWHEE; CHEWINK SWAMP ROBIN; GROUND ROBIN

(*Pipilo erythrophthalmus.*)

Male: upper parts black, wings and tail marked with white; throat and forebreast black; remaining part of breast and belly white in the middle and chestnut at the sides. Beak large, conical, black; feet horn color. Bird about half way in size between a robin and a sparrow; tail very long. Female: upper parts brown, wings and tail marked with white; throat and forebreast brown; remaining part of breast and belly white in the middle and chestnut at the sides. Rather smaller than male.

The towhee arrives about the first of May, and remains until early October. He may be sought in marshy thickets, where he is most likely to be found scratching the ground, or overturning the leaves in search of insects, somewhat as does a hen. They are rather shy birds, and it is not always easy to get a sight of them.

The nest is placed on the ground in low, wet woods, or in scrub, *i.e.*, bushy second growth, consisting chiefly of oaks and birches. Eggs are laid about the end of May.

The ordinary note sounds much like *chewink* or *towhee*. In addition, the males are said to have a sweet, simple song. In the region of New York they begin to sing only in late April, some time after their arrival, and they cease at latest by mid-August, more commonly about the end of July. The *chewink* note also is weak and infrequent in late summer, and may even be intermitted for a time, but is resumed again before departure.

50. FOX SPARROW

(*Passerella iliaca.*)

Upper parts ash, heavily mottled with bright rust-brown; wing with two whitish bars; under parts white marked with large, rust-brown spots. Beak conical, brown above, yellowish below; feet light brown. Bird distinctly larger than an English sparrow. Sexes similar.

This large and handsome sparrow comes to us late in March, and tarries until the beginning of May, when he goes on to his northern summer home; he is with us again in the fall, coming in late October, and staying occasionally even into December. He is to be sought on the edges of woodland, especially in the neighborhood of water; but in the fall frequents also dry regions, and sometimes open fields. He spends much of his time on the ground, seeking seeds and such food as he finds

beneath the fallen leaves; and he has the habit of scratching among them much like a hen, although, unlike a hen, he manages to scratch with both feet at once. When frightened he usually takes to the trees.

The russet groundbird bold
With both slim feet at once will lightly
rake the mold. — SILL.

Breeding takes place in the regions about Hudson's Bay and farther north. The nest is placed amid moss or on a low bush.

The song is one of the very best of all the sparrow songs. It may often be heard in the early morning in April, and less frequently in the fall. Minot remarks that it is sometimes abridged to a sweet warble, to which twitters are occasionally added.

It is said that they sing during migration only when present in considerable numbers.

51. SWAMP SPARROW (*Melospiza georgiana.*)

Upper parts streaked with bay, black, and flaxen, brown of wings and tail especially reddish; head with broad gray line above the eye; under parts ash-gray obscurely mottled and passing into olive-brown on the sides of the belly. Beak conical, dark brown; feet brown. Bird a little smaller than an English sparrow. Sexes similar.

THIS shy little bird comes to us in early April, and remains until the end of October, or even early

November, and he has been known even to pass the winter here. Although a common bird, he is so retiring in his habits as to be little known. He should be sought, as his name implies, in wet lands; and he prefers those overgrown with bushes. He spends much of his time upon the ground, often scratching among the leaves or wading in shallow water.

The nest is placed commonly in a tussock of grass, but occasionally on a low bush. Eggs are laid near the end of May, and there are usually two sets.

The song is said by Minot to resemble that of the catbird. They have also a sweet, clear trill, often heard in the spring, and a low warble. They sing chiefly in the cooler hours, especially in the evening, often continuing their music until it is almost dark. In the region of New York there are two song-periods: one beginning in late April, and continuing until mid-August or early September; and a second extending from mid-September to early or middle October. In this second period, song is by no means general, and is confined to early morning, but is more varied and ambitious than in the spring.

52. SONG SPARROW (*Melospiza fasciata.*)

Upper parts gray, streaked with brown and black; under parts grayish white, thickly marked on breast and sides of belly with distinct blackish brown spots, some of which usually run together to form a larger one in the centre of the breast. Beak conical, brown; feet light brown. Bird a little smaller than an English sparrow. Sexes similar.

THIS charming, abundant, and well-known songster comes to us about the middle of March, and lingers until late October. Not infrequently he spends the entire year in this region, although his increased shyness through the winter months renders him less familiar at that season. He may be sought especially on low ground, in the neighborhood of streams or other water. He is often on the ground, and when perched is usually not very far above it. In fall he associates with other birds of his own and other kinds, and is then often to be found upon dryer ground.

The nest is placed on the ground or in a low bush. Eggs are laid early in May, and there are two or even three broods. To accomplish this task in the limited time at their disposal, the male often builds the nest for a new brood while his mate is still caring for the present babies.

The song is most readily recognized from its re-

semblance to that of the canary; it has, however, many variations so different that they might well be attributed to several different species. The song sparrow is one of our very early spring songsters, coming next after the bluebird. In the neighborhood of New York he begins about the middle of February, and continues with varying vigor into November, sometimes to the very end of the month. In the beginning his song is feeble and indeterminate, but by early March it acquires its full tone.

LITERATURE:

A Year with the Birds. — WILSON FLAGG.

53. SLATE-COLORED JUNCO; BLACK SNOWBIRD

(*Junco hyemalis.*)

Upper parts, throat and breast blackish ash; tail with white outer feathers; belly white, its sides shaded with ashy. Beak conical, flesh color; feet light brown. Bird about the size of a sparrow, but with longer tail. Sexes similar, save that in the female the ash has a brownish tinge.

THIS well-known little bird may be recognized at once from the dark color and the white outer tail feathers. The sudden change from the slate of the breast to the white of the belly suggests the fancy that he was sitting on his nest "when God painted him." He comes to us in September, and remains

until May. He is stated to be common in winter only with the snow or just before storms; I have been more fortunate, however, in finding him in comparatively mild weather. He spends his time chiefly on the ground, and should be sought in stubble fields, edges of woodland, and especially on roadsides. He can readily be attracted to the door-yard by grain or crumbs, although he is easily startled, and ready to fly to the protection of shrubbery. Snowbirds usually come in small flocks, often accompanied by sparrows; when on the ground they have a characteristic habit of constantly opening and shutting the tail. They are said to be quarrelsome, but my observation does not lead me to agree with this statement.

Breeding takes place in the higher parts of western Massachusetts, in the White Mountains, and farther north. The nest is usually placed upon the ground, rarely in a bush. Eggs are laid about the first of June.

The snowbirds have in spring "a great variety of twitters, trills, and even tinkling sounds, which are often so combined as to form a lively song." Their chirp they utter particularly as they take to flight. There are two distinct songs; a simple trill somewhat like that of the chipping sparrow, and a faint whispering warble, usually much broken but not

without sweetness, and sometimes continuing intermittently for many minutes. Singing is most common in March, but may be heard at other times, least frequently in the fall.

54. FIELD SPARROW (*Spizella pusilla.*)

Upper parts gray, streaked with bay, black, and a very little flaxen; crown dull chestnut; under parts gray, tinged more or less with rusty; wing with two white bars. Bill conical, brown; feet brown. Bird not much more than two-thirds the size of an English sparrow. Sexes similar.

This common, but retiring, little sparrow comes to us in late April, and leaves in late October. North of Massachusetts he is rather rare, but with us he may easily be found by seeking him in dry, bushy fields, wood edges, and open pastures. He is much upon the ground, and when perched is usually not far away from it. During most of the season he is content with the society of his family, but in fall he joins his mate and other small birds in a loose flock. As he associates much at this season with chipping sparrows, it is a particularly good time for learning to distinguish him from this very similar sparrow. On comparing the two, it will be seen that the various colors of the field sparrow are duller, that the beak is light instead of black, that the chestnut cap is not bordered on each side by a gray, and

this again by a black line, and finally that the under parts are of a more or less rusty ash, instead of being clear ash as are those of the chipping sparrow.

The nest is placed in a field or bushy woodland, either on the ground or in a low bush. Eggs are laid in the latter part of May, and there are two sets.

The song is very sweet. According to Minot they open with a few exquisitely modulated whistles, each higher and a very little louder than the preceding, and close with a sweet trill.

They sing at various hours of the day, but most often in the early morning and toward evening. Song continues in the region of New York from the time of arrival to mid-August, and there is no second song-period.

55. CHIPPING SPARROW; SOCIAL SPARROW HAIRBIRD

(*Spizella socialis.*)

Upper parts gray, streaked with black and bay; crown chestnut, bordered on either side by a gray line and this again by a black line which passes through the eye; under parts clear ash; wing with two white bars. Beak conical, black; feet brown. Bird considerably smaller than a sparrow. Sexes similar.

THIS most abundant and familiar of all our native sparrows comes to us about the middle of

April, and remains until mid-October. They are to be found most abundantly on or near the ground, in parks and gardens, about houses, and along quiet roads. Their confiding habits have rendered them well known, and they are not ordinarily likely to be confounded with any other sparrow. Occasionally, however, they may be found in dry, bushy fields together with the field sparrow. The differences between these two very similar species have already been enumerated. (See No. 54.)

The nest is usually placed not far from the ground in shrubbery or vines. When trees are selected, cedars are preferred; but an orchard or occasionally a shade tree may be chosen. Its habit of lining the nest with horse-hair has given rise to the common name of hairbird. Eggs are laid about the first of June, and there are two sets.

The ordinary note is a single chip; besides this, there is a long, monotonous trill, somewhat like a watchman's rattle, which is sometimes given rapidly, sometimes more slowly.

LITERATURE:

Upland and Meadow. (Art. "Twixt Cold and Heat.") — C. C. Abbott.

56. TREE SPARROW; WINTER CHIPBIRD

(*Spizella monticola.*)

Upper parts gray, streaked with black, bay, and flaxen; crown chestnut, bordered on either side by a broad gray stripe, and this again by a narrow chestnut stripe which runs through the eye; wing with two white bars; under parts ashy; sides of belly somewhat rusty; breast with an obscure dusky spot in the centre. Beak conical, dark above, light below; feet strong, dark. Bird nearly as large as an English sparrow. Sexes similar.

The tree sparrow is one of our winter residents, arriving in late October or early November, and remaining until early May. During most of the season when he is here, the field sparrows and chipping sparrows, with which he may very easily be confounded, are in the South; but the three birds overlap in the spring and fall. It may therefore be worth while to point out that the tree sparrow differs from the others in being distinctly larger, and in ordinarily having an obscure dark spot on the breast. He is to be sought in weedy fields and along roadsides, and often in apple-trees. It is very common to find him with his mates in company with black snowbirds, though he usually rather avoids the neighborhood of houses.

Breeding takes place in Arctic countries only; the nest is placed on the ground or in a low bush.

The song is loud, clear, and strong, starting, ac-

cording to Brewer, "with two high notes, then falling rapidly, and ending with a low, sweet warble." The song usually begins in late March, but may occasionally be heard in November or December.

57. WHITE-THROATED SPARROW
PEABODY BIRD

(*Zonotrichia albicollis.*)

Male: upper parts streaked with brown, black and flaxen; head with longitudinal black and white stripes and a yellow spot in front of each eye; under parts dark gray, often obscurely streaked; throat pure white; wings with two white bars; tail long, brown. Beak conical, dark; feet horn-color. Bird about the size of the English sparrow. Female: similar but with duller colors, and the stripes of the head brown and white, instead of black and white.

THE white-throated sparrow comes to us in April, and leaves in May for the north, and on his southward return spends the month of October with us. During migration they are usually seen in small flocks in the neighborhood of low bushes and shrubs. They spend a great deal of time on the ground, where their large size and rather fearless disposition render them conspicuous.

The white-throat nests in northern New England, and at a few points in Massachusetts; the nest is usually placed on the ground, in or near a swamp, though sometimes it is built in bushes.

With us this bird rarely sings, although it may be heard both in spring and fall; but farther north his call is a familiar woodland sound. It consists of two long clear notes (which are not so easily heard as the remaining ones), followed by two or three triplets. It has been variously translated as Old-Sam-Peabody-Peabody-Peabody; all-day-whittling-whittling-whittling; or by homesick French Canadians, as La-belle-Canada-Canada-Canada.

58. SAVANNA SPARROW

(*Ammodramus sandwichensis savanna.*)

Upper parts streaked with bay, black, and flaxen; under parts white or buffish, thickly marked on breast and sides of belly with dark brown spots, some of which rarely run together to form an obscure blotch on the breast; head with a yellowish line above the eye and sometimes a suffusion of yellow in front of it. Beak conical, brown; feet light brown. Bird a little smaller than an English sparrow. Sexes similar.

NOTE. — This species is an extremely variable one; fall specimens are much more brightly colored than spring and summer ones.

THIS timid little bird is an extremely local sparrow; it is said to be most abundant in the salt water marshes and their neighborhood. It spends its time almost exclusively on the ground in pastures and open fields, several pairs usually frequenting the same field or strip of shore. It is especially

abundant about the middle of April and again in October, although many spend the entire summer with us.

The nest is placed on the ground; eggs are laid late in May, and there are two sets.

The song is quaint and simple, but not especially musical. In the region of New York they sing during the later part of the spring migration, *i.e.*, anywhere from the ninth of April to the second of May.

59. VESPER SPARROW; GRASS FINCH BAY-WINGED BUNTING

(*Poocætes gramineus.*)

Upper parts gray, streaked with dusky brown and flaxen; wing with two white bars; tail with outer feathers wholly or largely white; upper parts white or buff, heavily marked on breast and sides of belly with brown spots. Beak conical, brown; feet brown. Bird as large as an English sparrow. Sexes similar.

THE vesper sparrow comes to us about the middle of April, and leaves again in late October. He is to be sought in open fields and pastures, and about newly ploughed ground. He is readily recognized, because he is the only sparrow-like bird which shows white tail feathers in flight. He spends much of his time upon the ground, although by no means so restricted to it as his name would seem to imply. He owes his other name of vesper sparrow to the

fact that he sings with peculiar sweetness and energy as night comes on.

The nest is placed upon the ground, usually in a pasture or other open field. Eggs are laid in the latter part of May, and there are two sets.

The song resembles somewhat that of the song sparrow, though it is less lively. It is sometimes heard at mid-day, but more commonly in the early morning or toward dusk. Song continues in the region of New York to late July or early August, and once discontinued is not resumed in the same year.

60. SNOWFLAKE; WHITE SNOWBIRD SNOW BUNTING.

(*Plectrophenax nivalis.*)

Male: back and much of the wings and tail black; head, rump, and under parts white; both white and black more or less overlaid with warm brown; wings and tail largely white. Beak conical, light brown; feet black. Bird distinctly larger than a sparrow. Sexes often similar, save that the female is somewhat smaller, but female oftener much browner than the male, sometimes, indeed, of a streaky brown above and a brownish white below.

NOTE. — This description applies to the winter plumage, the only one likely to be seen by an observer in the United States.

THESE birds are very irregular in their appearance. They may be looked for in any open ground where seed-bearing weeds are to be found, but are espe-

cially numerous near the coast, where they feed upon small shell-fish. They commonly move in flocks, which often contain thousands of individuals, and may then be seen "whirling like a flurry of snow before alighting on the ground."

> *The sudden flurries of snowbirds*
> *Like brown leaves whirling by.*
>
> LOWELL.

They may be seen at any time in the winter, but are most likely to appear after there has been a heavy snowstorm in the north.

Breeding occurs in the Arctic regions. One nest was found "situated in a cave in a sandbank."

The note which I have most commonly heard is a weak chirrup, often uttered when on the wing. Minot speaks also of a "clearly piped whistle."

61. AMERICAN GOLDFINCH; YELLOW BIRD THISTLE BIRD

(*Spinus tristis.*)

Male in spring plumage: entire body clear yellow; forehead, wings, and tail black, the last two with white markings. Beak conical, horn colored; feet horn colored. Bird about two-thirds as large as a sparrow. Female and male in fall plumage: upper parts olivaceous; under parts yellowish gray; wings and tail dusky, marked with white.

THIS beautiful little bird comes to us in March or early April, and leaves again in October, though

some individuals always winter with us. He may be looked for in weedy pastures, but especially in the neighborhood of seeding sunflowers and thistles. Indeed, his devotion to this latter plant has gained for him the name of the "thistle bird."

Except at the breeding season goldfinches are usually found in small flocks; at that time they separate into pairs. The nest is placed at a moderate height in a crotch of a bush or deciduous tree, usually near the roadside. It is commonly built in late June or early July; but the time varies considerably, as does also the time of egg-laying.

The flight is undulating, consisting of alternate risings and sinkings, and is accompanied by a call which has been translated into the syllables, pretty-little-bird, or per-chick-o-pee. In addition, the birds when at rest give forth a song which, while not strong, is clear and liquid. Song begins in the vicinity of New York usually between the middle of March and the middle of April. It continues sometimes to the end of August, but there is no second song-period.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.

62. REDPOLL (*Acanthias linaria.*)

Male: upper parts mottled dusky and flaxen; wings and tail brown; wing with two white cross bars; forehead and breast, and sometimes rump, rosy; rest of under parts white, somewhat streaked with dusky. Bill small, conical, horn-colored; feet dark. Bird considerably smaller than a sparrow. Female: similar, save that the forehead only is rosy, and the under parts are more streaked.

THESE confiding little birds may be found during the winter in loose flocks, often associated with other birds, in weedy fields and other places where they can find seeds. They sometimes climb along the branches of shrubs, head downward, like chickadees. They are very irregular in their visits, but may be looked for any time from November to March.

They breed in northern regions, and the nest is built on the ground.

The note is a peculiar little call, something like the syllables chett or chett-cher-rett, and is frequently uttered while the birds are feeding or flying from place to place.

63. WHITE-WINGED CROSSBILL

(*Loxia leucoptera.*)

Male: dull rosy red, brownish on back; wings and tail dark brown; wing with two white crossbars. Beak large and strong, the upper part shutting against the side of the lower one, as in scissor blades. Bird about the size of a sparrow. Female: upper parts yellow-brown; rump yellow; under parts yellow-gray; wing with two white bars.

THE white-winged crossbill frequents cone-bearing trees, and has much the same habits as the American. It is, like that, an erratic winter visitor, but it is much less common.

Breeding is not known to occur in southern New England. The nest is built in deep woods, usually in a cone-bearing tree. Chamberlain speaks of finding nests in New Brunswick in January and February, so that it is possible that this species may have the same habit of occasional winter-breeding which marks the American crossbill.

The song is said by Brewer to be "irregular and varied, but sweet and musical."

64. AMERICAN CROSSBILL; RED CROSSBILL

(*Loxia curvirostra minor.*)

Male: dull brick-red, somewhat mottled with brownish; tail and wings dark brown, almost black. Beak large and strong, the upper part shutting against the side of the lower one like the blades of a pair of scissors. Bird about the size of a sparrow. Female: grayish green above; yellowish gray below; rump yellowish green.

The American crossbill, though resident in northern New England, comes to us only as an extremely irregular visitant, chiefly in winter. When it does appear, it is always in a flock, often made up largely of birds of other kinds, especially the white-winged crossbill. It is found especially in rather deep coniferous woods, where it feeds upon the seeds which its curious beak is well adapted to extract from the cone.

The nest is usually placed in a dense wood on an evergreen tree, at a considerable height from the ground. Crossbills have been known to breed, though rarely, in Massachusetts; and they have the very exceptional custom of breeding, occasionally at least, in January or February, though March is the more common time.

The song consists of a "number of loud flute-like notes frequently intermingled with several harsh chattering tones." And the female, contrary to the

usual custom of birds, is said to sing quite as well as the male.

LITERATURE:

Nidification of Loxia curvirostra americana. — "Bulletin of the Nuttall Ornithological Club," 1880.

65. PURPLE FINCH; LINNET

(*Carpodacus purpureus.*)

Male: body brownish rose, brighter on crown; wings and tail brown. "His color . . . looks as if it might have been imparted by dipping a brown bird in diluted pokeberry juice."— *Burroughs.* Beak large, conical, light brown; feet brown. Bird about the size of a sparrow. Female: upper parts dusky olive-brown, somewhat mottled; under parts white, heavily marked with dusky brown; wings and tail uniform dull brown.

THE purple finch frequents the orchard, the garden, and the edges of the woodland. He is often to be found on fruit-trees and elm-trees when they are in blossom, as he is fond of the flower buds. He is a resident, but more abundant in the warmer months from early April to October.

The nest is placed at a moderate height, sometimes in a pine or cedar, sometimes in a deciduous tree, and occasionally in a bush or hedge. Eggs are laid about the first of June, and there are often two sets.

This bird is one of our beautiful songsters; he

may be found singing at any part of the day, perched usually at the top of a high tree. Song begins in the neighborhood of New York any time from the first week in March to the fourth week in April, and continues until mid-July. In the fall a weak, desultory song may be heard during the month of October, and often in late September.

> *His song approaches an ecstasy, and with the exception of the winter wren's is the most rapid and copious strain to be heard in these woods. It is quite destitute of the trills and the liquid, silvery, bubbling notes that characterize the wren's; but there runs through it a rounded, nicely modulated whistle, very sweet and very pleasing.* — BURROUGHS.

FAMILY ICTERIDÆ

66. PURPLE GRACKLE; CROW BLACKBIRD

(*Quiscalus quiscula.*)

Male: lustrous black above and below with purple reflections; head, throat, and forebreast of a rich metallic blue, which varies much in brilliance with age and condition. Beak black, very large and strong; feet black; tail extremely long. Female: similar, but black rather faded, and lustre less marked. Female about the size of a robin, male distinctly larger.

The purple grackles come in early April, and stay until November. On their first arrival they may be met in large flocks on open land, sometimes clinging to a solitary tree until they blacken all its branches.

> *The blackbirds clatt'rin' in tall trees,*
> *An' settlin' things in windy congresses.* — Lowell.

During the summer they live in pairs, often associated in communities, but come together in large flocks for the autumn months. They may be found on open ground, walking instead of hopping over the fields, and searching for the insects which form a large part of their diet. Unfortunately for the farmer, they may also be found in freshly planted fields and amid ripening grain, where they feed upon corn, often doing immense injury to crops.

The nest is usually placed in an evergreen, sometimes very high, sometimes not more than six feet from the ground. Eggs are laid about the middle of May.

The note is a loud chatter or scream.

LITERATURE:

Upland and Meadow. — C. C. Abbott.
A Bird Lover in the West. — Olive Thorne Miller.
In Nesting-Time. — Ibid.

67. RUSTY BLACKBIRD; RUSTY GRACKLE

(*Scolecophagus carolinus.*)

Entire body rusty black with metallic green reflections. Bill long and dark; feet dark. Bird about the size of a robin. Sexes similar, but female more rusty and rather smaller than male.

Note. — This description applies to the winter plumage, the form which is commonly seen.

The rusty grackles appear in most of New England only as spring and fall migrants. They come to the region of Boston in late March, and pass on before the end of April; and they are with us again in September and October. They usually appear in flocks, often associated with other blackbirds, and are most commonly to be found in open and somewhat marshy country. Like other blackbirds, they walk instead of hopping.

The nests are built in bushes in swampy tangle. The birds breed sparingly in northern New England.

The note is the ordinary blackbird chuck. Ac-

cording to Bicknell they sing during both spring and fall migrations; and the authors of *North American Birds* mention "a very pretty note," which they regard as characteristic of early summer.

68. BALTIMORE ORIOLE; GOLDEN ROBIN FIREBIRD; HANGNEST

(*Icterus galbula.*)

Male: head, throat, and back black; rump and under parts from the throat back, fiery orange; outer part of tail orange, middle part black; wings black, with a little white on them, but not enough to make a wing bar. Beak long, strong, and dark. Bird nearly midway in size between a sparrow and a robin. Female: head and back olivaceous; rump and under parts yellow; tail olivaceous yellow; wings dusky with two white bars.

This is one of our famous beauties of bird life, noted alike for its flash of color, its assiduity in singing, and its skill at the loom. — COUES.

IT is a familiar bird of the streets and parks, especially abundant among elms. Its flight is singularly rapid and direct, hence the flash of its color.

My oriole, my glance of summer fire. — LOWELL.

It comes to the vicinity of Boston about the tenth of May, timing its coming by the blossoming of the fruit-trees, and it leaves us again in September. The males arrive first, and the character of the song is said to be quite different during and after the period of bachelor solitude.

The nest is purse-shaped, and is attached to the very end of a bough, preferably of an elm. Eggs are laid about the first of June.

The song is a loud, clear whistle, in which may be noticed at intervals the syllables tu-wee tu-wee. "The female, too, has her own peculiar and very pretty notes, which she incessantly warbles as she weaves her curiously elaborate nest." The oriole sings from the time of arrival to departure, but is nearly silent in July, and in August sings only in the early morning, and then but a few simple notes.

LITERATURE:

A Naturalist's Rambles. (Art. "A Short Study of Birds' Nests.") — C. C. ABBOTT.
Birdways. — OLIVE THORNE MILLER.
In Nesting-Time. — IBID.

69. MEADOWLARK; FIELDLARK

(*Sturnella magna.*)

Upper parts dark brown, streaked with flaxen, the general effect being somewhat like that of a sparrow's back; under parts bright yellow, the forebreast crossed by a heavy black crescent; outer tail feathers largely white. Beak long, strong, black; feet horn-color. Sexes similar, save that the female is smaller and somewhat duller. Size of male about that of a robin; female distinctly smaller.

THIS beautiful bird frequents the meadows and pasturelands from spring until late fall, and according to Brewster, is common near the coast even

during the winter months. I have been most fortunate in finding him in fields which are not far removed from streams. He spends a large part of his time on the ground, where he walks instead of hopping. His flight is very characteristic, consisting of a few rapid movements and then a long sail. Shelley's lines, though written of another bird, fit the meadowlark to perfection: —

In the golden lightning
Of the sunken sun,
O'er which clouds are brightening
Thou dost FLOAT AND RUN.

The nest is usually built on the ground in a meadow, on or near a tussock of grass. Eggs are laid about the last of May.

The song consists of a long, clear, and somewhat plaintive whistle, "a flute-note sweet and high," and the bird is one of our noticeable singers. He sings from the ground, from a tree-top, or when on the wing. In the vicinity of New York he may be first heard anywhere from early February until early April, and he continues sometimes until the third week of August. After a long silence, song is resumed in October and early November.

70. RED-WINGED BLACKBIRD SWAMP BLACKBIRD ; MARSH BLACKBIRD

(*Agelaius phœniceus.*)

Male: entirely black, save for a red patch bordered behind with yellow on each shoulder. (The red feathers are sometimes displaced, so that they do not show.) Beak and feet strong and dark (in male black). Bird nearly as large as a robin. Female: upper parts in general, including wings and tail, faded black; head somewhat mottled with whitish; under parts white, heavily marked with blackish brown.

> *Gay soldier blackbirds, wearing on their shoulders*
> *Red gold-edged epaulets.* — THAXTER.

THESE showy birds are inhabitants of low, wet fields, thickets, and marshes. They are often to be seen on the ground, either singly or in pairs; and they are especially noticeable in such circumstance from the fact that they walk instead of hopping, as do most birds. In the fall, when parental duties are over, they assemble in large flocks, and may then be found on any open ground. They come to the neighborhood of Boston in late March, and leave in October.

The nest is built in swamps or meadows, either on a tussock on the ground or in a bush, especially the alder. Eggs are laid in the latter part of May.

The redwing has a very characteristic note. Thoreau translated it into con-qua-ree; Emerson says, "The redwing flutes his o-ka-lee." The first two syllables are short and liquid, the third is a

long, creaking note. Unfortunately, unless one is near the bird, the first notes are apt to be missed. The chief song months are March, April, and early May; but he does not entirely cease, at least in the neighborhood of New York, until mid-July, and renews his music for a few days in October.

LITERATURE:

Birdways. — Olive Thorne Miller.

71. COWBIRD (*Molothrus ater.*)

Male: both upper and under parts of lustrous black with green and purple reflections; head and neck dark brown. Beak large, conical, black; feet dark brown or black. Bird about halfway in size between a robin and a sparrow. Female: upper parts brownish gray, obscurely mottled; under parts similar but a little lighter.

The cowbirds come to us in early April, and leave in late September. They are to be found either singly or in small flocks, usually perched on or near the tops of trees in open country, and in the vicinity of ploughed fields. The common name is due to their fondness for seeking food in the neighborhood of cattle. When on the ground, a place they rarely choose, they have the habit of walking rather than hopping, which characterizes blackbirds in general. They come to us about the first of April, and leave about the middle of October.

The cowbirds build no nest, but drop the eggs in the nests of other birds, usually choosing those of

birds considerably smaller than themselves. The laying season is from April until the middle of June.

The notes are for the most part unmusical — a loud chuck-see, produced only after the most laughable contortions, is the most common one. There is also, however, a "clear, rather shrill, whistle, usually followed by a few similar but falling notes."

Bicknell describes the complete song as ending with a sound "curiously like that of bubbling water," and adds that in the later part of the season this closing portion is often omitted. Song becomes infrequent in June, and ends in early July, to be resumed again during the month following mid-September.

72. BOBOLINK; SKUNK BLACKBIRD REEDBIRD; RICEBIRD

(*Dolichonyx oryzivorus.*)

Male in summer plumage: upper parts largely and under parts wholly black, often somewhat impure; a dorsal half-collar of buff; rump and upper part of tail ashy white. Beak black, conical. Female and male in winter: upper parts, including wings and tail, dark brown streaked with yellowish brown; under parts uniform yellowish brown. Beak horn-color, conical. Feet in both sexes strong, horn-color in female, darker in male. Bird rather larger than a sparrow.

THE bobolink should be sought in meadows, especially in such as border a stream. They come to us in early May, and leave in September. Like his rel-

atives, the bobolink walks instead of hopping when he chances to be on the ground; but he is much more likely to be met in a tree, swinging on some slender weed, or hovering in the air, ever pouring forth that ecstatic flood of melody which poets have tried in vain to imitate or even describe. Unlike most birds, the bobolink sings all day long, and its "mad music" needs only to be heard to be recognized. Some of its syllables resemble the word bobolink; but aside from this, the impetuous rush of song is unlike that of any other bird. The following translation of his song, "if repeated rapidly with a rising inflection in each part, illustrates it very well: Tom noodle, Tom noodle, you owe me, you owe me, ten shillings and sixpence. I paid you, I paid you; you didn't, you didn't; you lie, you lie; you cheat." — MINOT.

The bobolink sings into early July, the song gradually waning in beauty and frequency until it ceases; later he has only a single short note of a softly metallic tone.

The nest is built on the ground in meadows amid long grass, and is usually well concealed. Eggs are laid about the first of June.

LITERATURE:

Little Brothers of the Air. — OLIVE THORNE MILLER.
Birds and Poets. (Art. "Birds and Poets.") — BURROUGHS.

FAMILY CORVIDÆ.

73. AMERICAN CROW; COMMON CROW

(*Corvus americanus.*)

Body entirely black both above and below, beak and feet strong and black. Sexes similar, but female smaller. Male nearly twice the length of a robin.

Crows remain the entire year with us; they may be found almost anywhere on open ground.. They spend much time on the earth, where they walk instead of hopping. In winter I have found them inclined to be carnivorous, and readily attracted by meat when they are quite sure that it does not conceal a trap. During the day a few only are ordinarily to be found together; but, except at the breeding season, large numbers congregate to spend the night at some especially attractive spot. Thence they fly out in the morning for their day's foraging, and thither they return again in the evening, often in bands, flying in a long line.

The black'ning trains o' craws to their repose. — Burns.

The wariness and sagacity of crows have given occasion for many anecdotes, and make these birds especially interesting ones to study.

The nest is placed usually in high, thick woods,

preferably in a pine or cedar, and usually far up in the tree. Eggs are laid early in May.

The only note is the familiar caw.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.

74. BLUE JAY (*Cyanocitta cristata.*)

Upper parts gray-blue; wings and tail bright blue with black bars and with conspicuous white markings; under parts gray; fore-breast crossed by a black crescent which is continued up as a narrow black band over the crown. Crest present. "His saucy crest seems to be held in place by a band of black velvet ribbon passing under his chin." Beak and feet strong, black. Bird distinctly larger than a robin. Sexes substantially alike, but color of female rather less intense.

The jay may be found in any part of the woods, or, indeed, in open land in the neighborhood of trees. He is conspicuous among birds for his habit of walking instead of hopping over the ground. Some jays spend the entire year with us, but the greater number go south for the winter.

The nest is usually placed in an evergreen, at a moderate height, and often near the trunk. Eggs are laid in the later part of May.

> *He [the blue jay] is to be despised as a murderer, a thief, a rioter, and a disturber of the general peace. In the slaughter of babes . . . he out-Herods Herod. He sneaks into the nests of smaller birds, sucking their*

eggs or killing their young . . . and spreading sorrow wherever he goes. In the stealing of grain he rivals the crow. . . . As a leader of riots, though a coward, he does not hesitate occasionally to tease the hawks . . . or to take advantage of the owls when confused by daylight. . . . As a disturber of the general peace, he delights to spread terror among other birds by imitating the cries of hawks, or to deceive them by pretending distress. — MINOT.

The ordinary note is a scream, often uttered on the wing, which bears some resemblance to the syllable jay; but the bird is credited besides with a rich, bell-like note. He is said also to possess the power of mimicry and that of ventriloquism. The utterance of any note, save when he is on the wing, is accompanied by most ludicrous motions.

LITERATURE:

In Nesting-Time. — OLIVE THORNE MILLER.
A Bird Lover in the West. — IBID.
Little Brothers of the Air. — IBID.
A Naturalist's Rambles. (Art. "Three Beeches.") — C. C. ABBOTT.

FAMILY TYRANNIDÆ.

75. LEAST FLYCATCHER; CHEBEC

(*Empidonax minimus.*)

Upper parts olive-gray; wing with two white bars and white edges to many of the quills; under parts impure white except the fore-breast, which is grayish. Beak broad, flat, upper mandible dark, lower one light; feet black. Bird rather less than two-thirds the size of a sparrow, but with head and shoulders so large as to make it look like a dwarf. Sexes similar.

This droll little bird comes to us in early May, and leaves again about the middle of September. He frequents orchards and also the edges of woodland, especially that composed of birches, maples, or beeches. When he has selected his home for the summer, he often confines himself with some closeness to a single group of trees. He has all the ordinary fly-catcher habits, such as flirting the tail, scolding in a harsh, unmusical voice, and dashing into the air to catch a flying insect; and it is as irresistibly ludicrous to see this pygmy thus engaged, as to see small children mimicking their papas and mammas.

The nest is placed in an orchard or woodland tree, at a moderate height above the ground. Eggs are laid early in June, and there are two sets.

The song-note is a loud, emphatic, but unmusical

cry, resembling the syllables che-bec. Song ceases in the neighborhood of New York in late June or early July, and appears not to be resumed.

76. WOOD PEWEE (*Contopus virens.*)

Upper parts olivaceous; wings and tail dusky, wing with two white bars; under parts in general yellowish white; forebreast and sides of belly tinged with grayish. Beak broad, flat, upper mandible dark, lower one usually yellow; feet black. Bird distinctly smaller than a sparrow. Sexes similar.

A little bird in suit
Of sombre olive, soft and brown,
Perched in the maple branches mute;
With greenish gold its vest was fringed,
Its tiny cap was ebon-tinged,
With ivory pale its wings were barred,
And its dark eyes were tender-starred. — TROWBRIDGE.

THIS plaintive little creature comes to us only in the latter part of May, and leaves again in early September. He is to be sought entirely in woods, either dry or swampy, but is most likely to be found in the evening in the neighborhood of wooded pools and lakes, which afford an abundance of the flying insects upon which he feeds. When once discovered he may be conveniently studied, owing to his habit of returning day after day to the same place at about the same time. He has the usual flycatcher habit of selecting a post of observation

(usually in this case from ten to forty feet above the ground), whence he dashes out after an insect, returning after its capture to the same spot.

The nest is usually placed in an oak at a considerable distance above the ground. Eggs are laid about the middle of June, and there are often two sets.

The note is a plaintive pee-u-ee, often shortened to pee-u. He sings especially in the early morning and late evening, often when it is quite dark. In the neighborhood of New York his song ceases at any time between late July and the end of August, although occasional songs may be heard in September.

LITERATURE:

Little Brothers of the Air. — OLIVE THORNE MILLER.

77. PHŒBE; PEWIT; WATER PEWEE

(*Sayornis phœbe.*)

Upper parts grayish brown, darker on head; under parts impure white, passing into light gray-brown on sides and breast. Wing usually but not always with a white bar. Bill broad, flat, dark; feet black. Bird about the size of a sparrow. Sexes similar.

THE phœbe comes to us about the first of April, and leaves in early October. His comparatively fearless disposition and characteristic habits unite to render him familiar. He frequents somewhat

open ground where insects are abundant, and selects a good post of observation not very far from the ground. From this he makes constant sallies, pausing in mid air, and returning to his perch as if he had suddenly changed his mind. If one be near enough, however, one can hear the click of the beak which announces the fate of the unhappy insect in pursuit of which he dashed out. While perched he has a characteristic fashion of flirting his tail. Minot remarks, that in feeding from a swarm of very small insects, he frequently hovers with the body almost erect, and sustained by a rapid beating of the wings. He is almost never to be found upon the ground.

The nest is placed on any projecting surface, under the shelter of a bridge, ledge, or roof of a building, or sometimes beneath a ledge of rock. The bird is in the habit of coming back year after year to the same place. Eggs are laid early in May, and there are two sets.

The note is a somewhat harsh and querulous one, resembling the word phœbe. The first syllable is smooth, the second rough and broken.

> *Beside the common call-note . . . they have, during the love season, a low, twittering song with which they entertain their mates, but which is heard only when the birds are in company, and for a brief season.* — NORTH AMERICAN BIRDS.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.
In Nesting-Time. — Ibid.

78. CRESTED FLYCATCHER

(*Myiarchus crinitus.*

Upper parts olivaceous; throat and forebreast slate, passing into yellow on the belly; wing with two whitish bars, and the quills edged some with whitish and some with chestnut; tail with the inner side of each quill chestnut, so that the tail looks decidedly reddish from below. Slight crest. Beak broad, flat, black; feet black. Bird about half-way in size between a robin and a sparrow.

This fine bird comes to us about the middle of May, and leaves again early in September. It is a rather rare and local bird, but I have met it in Wellesley without special search. It frequents woodlands, choosing deciduous rather than evergreen trees, and, so far as my experience goes, choosing the edges rather than the deeper part. He usually perches near the top of a high tree, whence he makes those sallies after insects which are characteristic of the whole flycatcher group. In the fall, however, he is said to feed almost entirely upon various kinds of berries.

The nest is built in the hollow of a tree or occasionally in a bird-box, and the place selected is either woodland or a deserted orchard. Eggs are laid about the middle of June.

The bird "may be recognized by its singular notes — one a harsh, explosive outcry of one syllable, pitched in a high key, and others sounded in guttural tone two or three times — all suggestive of the bird's irritable and impulsive nature." — STEARNS AND COUES. Bicknell states that in July and early August the voice nearly or quite fails, and the note is single, faint, and somewhat mournful. In late July they attempt a return to the harsh outcry of the early summer.

79. KINGBIRD; BEE MARTIN

(*Tyrannus tyrannus.*)

Upper parts blackish brown; under parts white, somewhat tinged with gray on the sides; tail with white tip; some of wing feathers with white edgings; crown with a yellow spot which is ordinarily to be seen only by parting the feathers. Crown feathers may be erected into a low crest. Beak broad, strong, and black; feet black. Bird about half way in size between a sparrow and a robin. Sexes similar.

THIS active and pugnacious bird may be found in fields and along roadsides. He is commonly perched on a post or low bough on the lookout for insects. His sudden dart into the air or down to the ground, followed by a return to the post of observation, is extremely characteristic. Sometimes one may even hear the click of the bill which announces the fate of the unhappy insect. He is

with us from early May until September. Parkhurst notes that in bathing he flies from his perch directly into the stream, dashes the water over his back, and returns to his place, repeating the performance several times. It is perhaps this habit which has given rise to the unfounded idea that he feeds upon small fish.

He owes his name to the fact that he is the one small bird who ventures to attack the marauding crow, and that he always comes off victorious. Rising above his foe, he drops down upon his back, attacking him with beak and claws until the unlucky intruder makes off in ludicrous consternation.

The nest is usually placed at a moderate height on the horizontal bough of a tree in the orchard or by the wayside. Eggs are laid early in June.

The note is a sharp twitter, often somewhat resembling that of the swallow.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.

FAMILY TROCHILIDÆ

80. RUBY-THROATED HUMMINGBIRD

(*Trochilus colubris.*)

Male: upper parts green; wings and tail dusky; under parts grayish; throat in different lights may look slate, or brilliant metallic red. Beak long, black, and needle-like; feet tiny. **Female**: in general similar, but the throat is white, specked with dark, and the outer tail feathers are tipped with white. The male from tip of tail to tip of beak appears about three inches long, and the female is about half an inch less.

The least of birds, a jewelled sprite
With burnished throat and needle bill. — SILL.

THESE exquisite little beings are attracted especially by long-tubed flowers, such as the nasturtium, the trumpet creeper, and the honeysuckle. They are singularly fearless, coming readily into the immediate neighborhood of houses, or even of persons. I have had the same bird come twice over to poise before a cluster of nasturtiums which I held, brushing the hand which held them, and seeming to regard it as a new and improved kind of flower-stem. They may be found all through the summer, from early May even to mid-September.

The nest is usually placed on the limb of an oak or an orchard tree, and so thickly covered with lichens as to look like a part of the branch. It has

been known, however, to be attached to the stalk of a large weed. Eggs are laid early in June.

There is no song, but a constant buzz like that of the bee, due not to the voice, but to the wings. The cry is a sharp, high squeak, only emitted in moments of great excitement.

LITERATURE:

Upland and Meadow. — C. C. ABBOTT.

The Footpath Way. (Arts. "A Widow and Twins," and "The Male Ruby-throat.") — BRADFORD TORREY.

FAMILY MICROPODIDÆ

81. CHIMNEY SWIFT; CHIMNEY "SWALLOW"

(*Chætura pelagica.*)

Entire body, both above and below, a sooty brown, lighter on the throat; wings black. Beak extremely small and weak, black; feet small, black. Bird with very long wings, and a tail so short as to be almost absent; tail feathers with spiny tips. Bird considerably smaller than a sparrow.

The chimney swift reaches us early in May, and leaves again in August or September. He is readily recognized by his skimming, swallow-like flight, and apparent want of tail. He is a very common bird; but as he is always on the wing, save when in his roosting-place, it is impossible to predict where he may be found. The best way to study these birds is to find a chimney which they inhabit, and watch them as they gather in great flocks toward evening, circling about the chimney, and gradually dropping into it.

The nests are ordinarily fastened to the inside of a chimney, though in sparsely settled regions the birds are said to still build them as they formerly did, in hollow trees. Eggs are laid about the end of May, and there are often two sets.

The only note is a loud chip, or a rapidly accelerated chatter, which may be heard all through the summer, except in cool evenings.

LITERATURE:

Up the Chimney. — FRANK BOLLES. *Popular Science Monthly*, 1894.

FAMILY PICIDÆ

82. FLICKER; HIGH-HOLE GOLDEN-WINGED WOODPECKER PIGEON WOODPECKER

(*Colaptes auratus.*)

Male: upper parts in the main dull brown barred with black; head gray-brown with a scarlet band at the nape, and a black cheek patch on either side of the mouth; rump white; throat and forebreast lilac-brown shading into white on the belly; breast with broad black crescent, and under parts behind this thickly marked with circular black spots; wings and tail largely yellow beneath. Beak large and strong, dark; feet dark. Bird considerably larger than a robin. Female: similar, save that the black cheek patches are usually absent.

This abundant and lively bird may be looked for in any woodland, in parks or orchards, or even on the open ground far from trees. When among trees it often perches like ordinary birds, instead of clinging against the trunk like other woodpeckers. It is a strong flier; and in a good light the golden under side of the wings, appearing and disappearing, lends a beautiful shimmer to its movements. It is a resident, but less common in winter than at other times. They usually appear in numbers about the first of April.

The nest is a hole dug out usually in the trunk of

a tree at a moderate height above the ground. Oaks, maples, and apple-trees are favorites; and the nest is ordinarily placed in the woods, or at least not in an isolated tree. Eggs are laid in the latter part of May.

One of the most common cries consists of two notes frequently repeated, which resemble somewhat the syllables, *flicker*, *yucker*, or *yarrup*, by all of which names the bird is known. The spring-time note "imitates a prolonged and jovial laugh, heard at a considerable distance."— AUDUBON.

LITERATURE:

In Nesting-Time. — OLIVE THORNE MILLER.
Little Brothers of the Air. — IBID.

83. DOWNY WOODPECKER

(*Dryobates pubescens.*)

A miniature edition of the hairy woodpecker, save that the outer tail feathers, instead of being entirely white, are barred with black. The scarlet patch is lacking in the female of this, as of the larger species. The bird is about the size of a sparrow.

THIS bird is our commonest woodpecker, and is abundant not only in woods but in orchards. Save in this respect, its habits, as well as its appearance, agree with those of the hairy woodpecker (*q. v.*). There is no such difference in the character of the plumage as the common names might imply.

It is to this little fellow that we are indebted for the regular rows of small holes which so often mark our apple-trees. They are drilled as a necessary means of obtaining the insect grubs and larvæ which burrow beneath the bark, and which form a large item in his bill of fare.

The nest is a hole excavated in a tree, or rarely in a post. Apple, birch, and poplar trees are favorites. Eggs are laid about the end of May. According to Minot, "The ordinary note is a chink or chick, which they most often utter on alighting on some tree or fence. Occasionally they repeat this rapidly (as chick-a-chick-chick chick-chick)."

84. HAIRY WOODPECKER

(*Dryobates villosus.*)

Male: upper parts in the main blackish brown, barred and spotted with white; back black, with broad white band down the middle; head black, with white band above the eye and another below it; back of head with scarlet patch; outer tail feathers white; under parts white. Beak strong and dark; feet dark, two toes turned back and two forward. Bird nearly as large as a robin. Female: similar, but without the scarlet patch.

This bird is one of our rarer woodpeckers, and is less often seen than the downy, not only because it is less common, but also because it is more inclined to keep in the woods. It may be found in

any woods, clinging against the trunks, and hammering away as it drills a hole into the tree in search of the insect larvæ which form its food. During this operation, it supports itself not only by its feet, but by the pointed tips of its tail feathers, which it sticks into roughnesses of the bark. Owing to this structure of the tail, the bird never runs down a trunk like the nuthatches, but always up. It spends the year with us, but is more common in the fall and winter, as it breeds only locally in southern New England.

The nest is a hole excavated usually in a trunk of a tree, either in orchards or in woodlands. Eggs are laid about the middle of May.

The bird is usually silent, so far as any call is concerned, though the wood may ring with his hammering; the voice is, however, said to be loud and harsh.

FAMILY ALCEDINIDÆ.

85. BELTED KINGFISHER

(*Ceryle alcyon.*)

Male: Upper parts gray-blue with a conspicuous white collar; under parts in general white, but with a broad gray-blue band across the breast; sides under the wings gray-blue. Crest large and conspicuous. Beak very strong, longer than the head, dark. Feet brown, tarsus (i. e., the first joint above the toes) very short. This condition is compensated by having the joint next above the tarsus partly bare of feathers. Bird distinctly larger than a robin. Female: similar, but with a chestnut belly-band in addition to the blue-gray breast-band, and with the sides under the wings chestnut.

THESE fine birds spend as large a part of the year as possible with us, being forced south only by the freezing of the streams from which they draw their food. They come in March, and leave in November. They may be found in the neighborhood of any pond or large stream, but are not abundant, as one pair usually pre-empts an entire body of water.

The nest is a long burrow in a sandy or gravelly bank, usually near the water. Eggs are laid about the end of May.

The cry, loud and hoarse, is not unlike a watchman's rattle.

LITERATURE:

A Naturalist's Rambles. — C. C. ABBOTT.

FAMILY CUCULIDÆ.

86. BLACK-BILLED CUCKOO; RAIN CROW

(*Coccyzus erythrophthalmus.*)

Upper parts olive-gray; under parts white; tail much rounded, very long, and with the outer feathers with small whitish tips, which are hardly noticeable in flight. Beak long, almost entirely black, upper mandible much curved; feet dark. Bird about the size of a robin. Sexes similar.

The black-billed cuckoo arrives late in May, and leaves us again early in September. He frequents low, swampy woods and shrubbery, but is also to be found more or less in cultivated ground. He seems to be attracted by caterpillars of various sorts; one year, when the oak caterpillar caused great damage to the college trees, the cuckoo appeared to abate the nuisance. He is at no time very abundant, though commoner in the neighborhood of Boston than farther north.

The nest is usually placed in a low shrub or tree in wet woodland, and is commonly only a few feet from the ground. Eggs are laid in June.

The notes are somewhat varied, but all resemble somewhat remotely the word cuckoo.

LITERATURE:

Little Brothers of the Air. — Olive Thorne Miller.

87. YELLOW-BILLED CUCKOO; RAIN CROW

(*Coccyzus americanus.*)

Upper parts olive-gray, shading into reddish brown on the wings; under parts white; tail much rounded, very long, and with the outer quills marked with large, conspicuous white tips. Beak long, upper mandible much decurved and almost entirely black, lower mandible almost entirely yellow; feet dark. Bird about the size of a robin. Sexes similar.

The yellow-billed cuckoo is in general habits similar to the black-billed. He is with us a rarer bird, and ordinarily inhabits high, dry, and wooded land.

The notes are similar to those of the more familiar species.

According to Burroughs, although he is rarely to be seen by day, he wanders freely about at night. "His peculiar guttural note, now here, now there, may be heard almost any summer night in every part of the country, and occasionally his better known cuckoo call."

ORDER LIMICOLÆ.

88. SPOTTED SANDPIPER; TIP-UP TEETER-TAIL; SOLITARY TATTLER

(*Actitis macularia.*)

Upper parts olive-gray marked with cross bars of blackish; under parts spotted with sharply outlined blackish spots; edge of wing and tips of tail feathers marked with white. Beak about an inch long, slender, pale; legs long and bare for some distance above the first joint, pale. Bird distinctly larger than a sparrow. Sexes similar, save that in the female the spots on the under parts are larger and more crowded.

The spotted sandpiper comes to us in early May, and leaves again in October. Although not a land bird, he is included in our list because he is so likely to be found in similar haunts. He is the commonest of all our marsh birds, and is frequently to be met along low river shores, where he is easily recognized from his habit of jerking the hind part of his body and his tail up and down with a motion as regular as that of clockwork. From this peculiarity he has received the name of tip-up or teeter-tail. The flight, too, is unusual; it consists of a quick stroke, followed by a long slide close above the surface of the stream.

The nest is placed upon the ground in a field or meadow, usually near water.

The note resembles the syllables peet-weet or peet-weet-weet-weet.

LITERATURE:

Birds and Seasons. — WILSON FLAGG.

89. SOLITARY SANDPIPER; SOLITARY TATTLER

(*Totanus solitarius.*)

Upper parts olive-gray, marked with small white spots; under parts white, sides of neck and breast shaded with mottled gray-brown. Beak about an inch long, slender, dark; legs long, dark, bare above the first joint. Bird about half-way in size between a sparrow and a robin. Sexes similar.

THE solitary sandpiper, like the spotted one, is not a land bird, and is included in our list only for convenience. It may occasionally be met during the migration seasons on the shores of fresh-water ponds and lakes. It spends only a short time here, however, passing northward to breed. Its habits are in general much like those of the spotted sandpiper.

Breeding takes place in Northern New England and northward. The only nest which has been discovered was placed upon the ground.

The bird is usually silent except when suddenly flushed; at such times it utters a sharp whistle.

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